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JANUARY, 1859.

THE

FARMER AND PLANTER:

PUBLISHED AT

COLUMBIA, S. C.,

BY

R. M. STOKES.

DEVOTED TO

AGRICULTURE, HORTICULTURE, STOCK RAISING, MECHANICS,
AND THE INTERESTS OF THE SOUTH, GENERALLY.

EDITED BY

COMPETENT PRACTICAL FARMERS AND HORTICULTURISTS.

PRICE \$1 A YEAR, ALWAYS IN ADVANCE.

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OUR ADVERTISING PAGES.

We present in this number quite a respectable amount of advertising; but, in our opinion, not more than half the quantity we had reason to expect would have appeared. It will be apparent that but few of the merchants or other business men of Columbia care much about asking the patronage of the Farmers and Planters of the State, or they would most certainly have availed themselves of the **BEST OPPORTUNITY** they ever had of presenting their claims to **SIX THOUSAND** of the most reliable and liberal buying Families in South Carolina, at **LESS PRICE** than such advantages could be secured in any other way, or through any other channel.

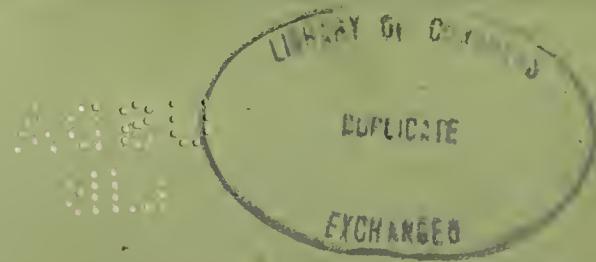
From Charleston, our favors are alone from our friends, JOSEPH WALKER and L. M. HATCH, with both of whom we are well acquainted, and know them to be gentlemen of high character and responsibility.

Our friends, ALLEN & DIAL, FALLS & KINARD, R. L. BRYAN, JANNEY & LEAPHART, G. T. MASON, ALEXANDER & Co., WILLIAM RAMSAY, W. S. WOOD & Co., and many others of Columbia, whose advertisements appear in this issue, we commend to the Farmers and Planters of the State, as gentlemen entitled to their patronage. We have known them for years, and feel no hesitation in saying they are in every respect worthy the most implicit confidence.

It may be as well to state, here, that we are not dependent upon advertising for our support—our field is the whole State—but believing we offer superior inducements to advertisers, in consequence of our large and peculiar circulation, we shall *in no instance* deviate from our terms of advertising, as published on the 4th page of the cover. Those wishing to use our journal, as an advertising medium, can do so alone on those terms.

OUR ILLUSTRATED COVER.

We regret being compelled to issue this number without the beautiful Engraved Title-Page we promised, but, after waiting for it nearly two weeks, we have concluded to put the January number to press without it, with the assurance that it shall appear in the February issue, which will be pushed forward as quickly as possible. We trust our patrons will excuse the delay of issuing, which could not be avoided. We hope to issue the March number at the right time.





VOL. 10.

JANUARY, 1859.

NO. I.

R. M. STOKES, }
PROPRIETOR.

COLUMBIA, S. C.

{ NEW SERIES,
VOL. 1, NO. 1.

ANNIVERSARY ADDRESS

OF COL. A. P. CALHOUN, *President of the State Agricultural Society of South Carolina, delivered before the Society at its third Anniversary Exhibition, in November, 1858.*

CORRESPONDENCE.

Columbia, Nov. 12th, 1858.

COL. A. P. CALHOUN—

DEAR SIR: The Committee to whom was referred the pleasing duty of requesting a copy of your eloquent, spirited, and instructive Address, respectfully solicit the manuscript for publication.

Hoping you will comply with the request of the Society, and the desire of the Committee,

We remain,

Most respectfully,

Your ob't servants,

WM. S. DOGAN,
A. G. SUMMER,
WM. R. ROBINSON, } Committee.

Columbia, Nov. 12th, 1858.

GENTLEMEN: In compliance with your request I will hand a copy of my Address to the Secretary of the Society, for publication.

Truly and respectfully,

Your ob't serv't,

AND'W P. CALHOUN.

Messrs. W. S. DOGAN,
A. G. SUMMER,
W. R. ROBINSON, } Committee.

ADDRESS.

It is certainly encouraging to find each recurring anniversary eclipsing the previous one in the numbers attracted—the zeal enkindled—the quantity and quality of productions, and the steadily im-

proving exhibit made by our Society in developing the resources of our cherished State.

That only unmitigated good can result from such an organization, none can dispute. That no one can enlist, zealously, honestly, and boldly, in behalf of our Society, without having deeply at heart the welfare of his native or adopted State; and that he who thus enrolls, has lukewarmness, prejudices, deep seated and confirmed bad habits to combat and eradicate, before he can hope to attain present or eventual improvement, is also apparent. No one is so wedded to the usages of the past as the farmer and planter; none yield to changes more reluctantly than they do, as a class.

To disturb the surface of the earth—to be ready at seed time and harvest—to gather the crops, and consume and sell the surplus, forms the usual routine of planting life; and yet, how entirely on the suburbs of the great crowd of mysteries is such a vegetating existence to the human being! and how little so to the plants that, without cultivation, food, or proper knowledge of their wants, become stunted, or pine away, from sheer ignorance and neglect! No profession requires greater or more accurate knowledge—none encouragement—as much as agriculture; and yet, it is proverbial for its ignorance; and it is equally notorious that, instead of being promoted, it is the only really oppressed interest under every form of government upon earth.

The political state of agriculture is not as well understood even as the scientific: hence we see large tracts of the earth's surface (where once civilization, wealth and splendor sprang from the teeming abundance of rich soil and successful agriculture) turned into a howling wilderness, by the oppression that, by degrees, absorbed their sub-

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stanee, to support regal or usurped power, which devoured the vitals of their strength, based, as it was, upon the products of the soil ; and the villas, the farms, the magnificent cities, went down to ruins and desolation.

The soil is yet rich ; the seasons still regular ; the same sun stands fixed as the earth bares its bosom diurnally to be ravished by his warmth ; but the eheerful voice of the husbandman is no longer heard in those fields, once loaded with grain, but now relapsed into a wide morass, or solitary waste. A false system of government—one that plundered and oppressed its agriueulture—overwhelmed, in a common ruin, the dynasty and its subjeets—the oppressor and the oppressed. It is not the climate or the soil that develop the greatness of a people ; it is the eharaeter of the government that directly acts upon the energies of the people ; and to understand how agriculture droops under the extortions and tyranny of governments, we must study the past ; and as time passes over successive generations, burying the living impulses, for good or evil, that either blessed or cursed the period of their existenee, it is useful to recur to the lessons it has taught, to enable us to deduct important truths from the mass of error that has involved a struggling humanity in its too often hopeless efforts to free itself from the complications that false doctrines and selfish theories have perpetually involved it. The pages of history are but one tissue recording the vaulting ambition, in every epoch of the world, of bold and impulsive minds, that looked upon their species as mere instruments to gratify their aspirations ; and such is the fatuity of human nature, that intelleetual power, conjoined with daring and boldness, inspires awe, and makes a submissive world bow to the military chieftain and ruler in one age, while, in another, craftiness, duplicity, and syeophancy, raises a eapacity but little above mediocrity to power and place ; and thus entrenched in the af- fections of deluded followers, in the name of the people, he erects the guillotine, to wreak his enmity against the virtuous and bold advoeates of their country's honor and liberty, who had ineffectually opposed his serpent-like progress to power.

Then, again, the scenes shift, and another era looms up—Liberty, Equality, Fraternity, have done their work. Every imaginable grievance in society is to be cured by the one or the other of these talismanic words, and the most adroit magieian becomes the trusted leader. Yes, Liberty!—that word so world-inspiring, that exeteits such high hopes in the human breast, that individuals and nations pant for, but eannot find—who, in place of an

ideal something they eannot well define, when they tear the veil aside, lo ! instead of the lovely genius, so transeendently fascinating, a deformity so hideous is unfolded, that society stands aghast at its delusion ! Still, onward is the rush for Liberty—that is, non-interference on the part of power with inalienable private or seetinal rights. A still, small voice comes up from a distant nation, almost a wilderness, erying out Eureka ! The baffled and werried nations of the old world hear the annouement in doubt and misgiving. At last the problem is solved. In the name of liberty, solemn maxims are proclaimed ; each citizen is entitled to "life, liberty, and the pursuit of happiness" : laws are framed, constitutions are made, by the whole people meeting in convention, by direct delegates, holding sovereign power in full, to make or unmake politieal organizations. There were thirteen distinct nations so engaged. They first made a bond of perpetual union, which was changed by thirteen States entering into a written eompaect, or Union ; the powers granted are to be found in the contract or Constitution, and all not found there, reserved to each State. The Northern division was eommercial—a rock-bound coast, fine harbors, and generally sterile soil ; the Southern was almost purely agriueultural—a low and shallow coast, but few fine harbors, abounding in rich soil, and approaehing the tropics—of genial climate, eapable of produeing many staples of great and permanent value. Two sections so entirely different, (naturally, for the sake of liberty,) launched upon the experiment of free government—not individual freedom, but a delegation of power on the part of the people of each State to frame a State constitution, and a delegation of power to form a joint compact, or alliance, with the other States, for special purposes—the individual not known in this last, except through the action of his State: hence we have, not a Demeratie, but a Republiean form of government.

I am pressing as rapidly as possible to the point that, when two people, with distinct interests, enter into a common government, the ordinary motives whieh actuate human nature will eome into action, and without checks and balances suffiently strong to prevent inroads upon their rights, the strongest will virtually hold the government, and merge all the advantages into the aecumulation of the power, strength, and wealth, of the joint system. This principle of aetion has already converted the localized commercial and manufacturing interests into a dominant ruling power over the agriueultural. An investigation into these general eauses, that operate so disastrously upon the Southern or agricul-



tural States, is the first indispensable step to be taken, to post ourselves up thoroughly, before we take into consideration the detailed question of the improvement of soil, that is induced by the action of individuals in making practical experiments upon their plantations and farms.

We assume the position, that it matters not how much an individual may improve his possessions, if there are causes at work that drain his surplus profits as rapidly as he makes them. A people may flourish, apparently, by habitually receiving high prices; but they may pay more to obtain them than their profits amount to. For instance: those engaged in agriculture in Great Britain, constitute but a small part of her population—probably not one-tenth. The large amount of consumers who live upon the bounties of government—the large idle interest created by a funded debt—the manufacturing and commercial pursuits, protected by laws that give them governmental patronage; all disgorge a part of their surplus to enhance the price of agricultural products. While they pay increased prices for all they consume, the farmer (to support the gigantic system of taxes raised for the benefit of the favored interests,) pays back all, or more than he receives from enhanced value; and, instead of becoming richer, the landed proprietor forces the cultivator of the soil to a state of degradation that impels him to work for mere subsistence.

It is, unfortunately, the tendency of all governments to be diverted from the purposes for which they were instituted. To protect life and property, and give security for the present and future to every part of society, is the object of government. But instead of an impartial distribution of patronage, the stronger and more combined interests seize upon its powers, and convert them to their own selfish views. In this combination the agriculturalist never enters; he is kept muzzled to tread out the corn that fattens every other department of society, who are satisfied to give him a scanty portion of his gains for support, and appropriate the larger portion to increase their stores of opulence and luxury. While the tiller of the soil literally fulfills the sacred mandate—by the sweat of the face to gain his bread—all the other pursuits of life try to evade a decree upon which the foundation of man's prosperity and happiness must forever rest. The aspirant for the favor of government—the beggar interests who want more for their products than they are fairly worth—the recipient of the favors of government, under any form or shape—all conspire to rob the revenue, and raise it to the highest point a

humble and patient agricultural interest will bear. But so insidiously is this done, under the cover of charters, contracts, and expenditures, that the robbed, plundered, reviled planting interest never is permitted to mutter out a note of discontent, without having some identified in interest with themselves, corrupted by the offer of gain, or personal ambition, joining with the adverse interests, and giving specious reasons to decoy the simple and confiding farmer: hence a superior commanding and leading pursuit is harassed by armies of harpies, devouring, as rapidly as made, the honest result of hard-earned labor. How can this be counteracted? How can we place agriculture in the front rank, that her superior capacity to administer to the world's wants entitle her? Education and tone of character can alone enable her to assume the position she is fully entitled to. The day is past when to speed the plow alone constitutes agriculture. It has become an art—a noble and beneficent science; one that is now dispensing greater blessings upon the human family than any in the whole range of developed intelligence throughout the civilized world.

Heretofore the cultivation of the earth developed the physical man; now it metes out to the potent application of mind and reason its fruits and most abundant blessings. Mind and labor walk hand in hand to court the great mystery of Nature, whose laws lie hidden from transient view, but who initiates man into a solution of them that raises his heart in joyous reverence to the Great Ruler of a glorious creation, that he should indulge his finite capacity with glimpses into the workings of His sublime ways, by which the eternal truths are elucidated, to prosper and increase the human race.

Where is there, on earth, a profession that requires more mental research—more varied and accurate information—a more discriminating or acute mind, to travel through the labyrinth of ideas, and take the correct direction, which can alone prosper or recompense the student who diligently seeks to be installed into the wonders of creation? The varied play of seasons, with its atmospheric phenomena—the innumerable causes by which the plants that administer to the absolute wants of man, in food, clothing, or luxury, are forced to exuberant returns, or blighted by adverse causes—the vast changes always being enacted on the crust of the earth, immediately beneath the foot-fall of man—a moving, changing, and perpetually assimilating or repelling series of causes, always giving to, and receiving from, the great store-house of nature; all moving in obedience to fixed laws, and performing each part in the immense whole, with the same un-

deviating accuracy—the bringing artificial means to bear with full power and coercive property, making earth and atmospheric enter into a joint agency, to furnish exactly to the wants of the particular plant such food as will start its germ, expedite its growth, and expand to perfect development its complete fruition. Here is a field as wide as the limits of the earth for the investigator of agricultural truths to encompass. Who could not be fascinated by such inquiries? The consolation of success brings greater rewards than any other investigation. It empties the cornucopia of Ceres upon his fellow-creatures. It increases the supply of food and raiment, and with it enlarges the number of human beings to be fed and clothed. Instead of the political economist, calculating the supply of food, (the scarcity of which consigns millions to perish by famine,) the adept of agricultural science goes to work to make two ears of corn grow where one did before, and thus doubles the supply of food, making plenty rule the present, instead of gaunt want—a happy and increasing multitude, instead of a miserable and starving one. Such has been the reward of science and scientific men in the last half century.

A wide spread education—seats of learning located in every quarter of the civilized world, annually throws out an army of educated minds, whose restless anxiety to go still further in acquiring information, is daily enlarging the horizon of knowledge. Especially in agriculture is the change a marked one. No Canute can stay the tide as it rises higher and higher, under fixed laws—not to inundate, but fertilize the earth. What bounds can be set to it? Man and his Creator are brought in contact; and the creature who it has pleased Him to place on this earth, to rule and cultivate it, finds that upon the exercise of his faculties the ways of the Most High are made manifest, and the human mind enters into an undiscovered world, whose wonders have lay hidden until brought to light by a lamp presented by science, which, the more it is rubbed, the ofetner does the Genii of intelligence appear to reward the worker. What romance reads like the discoveries of science? How radically they unhinge all pre-conceived ideas!

The pride of opinion must yield in the progress of agriculture. In the infancy of the art, how far removed the yeoman of the soil from the truths that encompassed him! Perhaps our advancement now, will, in the future, be equally contrasted with the splendid discoveries that may be reserved, yet to be made. The rapidly increasing experiments and revelations that are daily divulged, show that

higher summits loom up as we reach one elevation. To predict the ultimate capacity that may be reached by agriculture, would be a rash venture. Why, then, has such a profession not taken a more distinguished part in the history of the human race? So remarkably has it been submerged, that Cincinnatus, taken from his plow, seems, in its solitary example, to stand out in history. It is because it is reserved, as the origin of all wealth, to be plundered; and the aspiring intellect joins the alliance against it, under the certain conviction that fortune and fame is to be acquired at the expense of agriculture, but not in connection with it. Hence, in non-slaveholding communities, the agricultural laborer is a mere human machine for tilling the earth—an automaton that handles the plow, the hoe, or the spade, and digs the ground that he may satisfy his wants of food and clothing. He works, he sells his produce, he eats, drinks, and sleeps, and takes what he can get, without one thought of what will happen to-morrow to raise the price of his products, and, in fact, is just the object that the sharper, as an individual, or in co-operation with government, delights he should remain, to use him to advantage: hence, labor on, labor evermore; and neither the ancestor or his descendants know any change. The rough exterior—the rough home-stead—the rough fixtures, and, worse than all, the ignorant and uncouth being is the offspring of a system that has heretofore discredited man, when connected with agriculture. Upon his ignorant head and honest shoulders humbuggery and extortion is plied without stint. He is the plaything of the demagogue, the tool of party, and fawningly delights to lick the hand that smites him, especially if the rod is held by those to whom he has, under some Magna Charta, received or delegated commissions of power; or, it may be, assumed without color of law. He is the corner-stone of society, and rests low, and out of sight of the immense power that is built upon his resources. The pomp and circumstance of glorious war—the splendor and pageantry of power—the huge leviathan that sports in the glory of steam upon the ocean—in fact, from the highest to the lowest strata in society, all repose upon agriculture. Yes; the sinews of war—the basis of trade—the raw material of manufacturers—the prolific source from whence all professions and arts receive their income—the source of all wealth; yet the great mainspring only indicates its power by the movements of its hands, as they pass around the circle of human wants.

We of the South, who own the laborer of the soil—who make agriculture our chief occupation—

who bring education and reflection to bear upon our own pursuits—we who see how other interests in society try to live upon us—who know that we support a government of immense power and patronage, inimical and antagonistical to the core against us—who know we raise staples that must command peace and security from all the leading nations of the civilized world, no matter how reluctantly they may be forced to repress their abstract opinions against our institutions and society—who know that all we have to fear is supineness and treachery at home, to repel attacks of a common government against our honor, our peace, our purses, and our property—who feel we control, by our climate, by our slaves, by our intelligence, by our crops; and, if true to ourselves, as far as human foresight is permitted to penetrate, must continue to do so—the great stronghold of every commercial and manufacturing community upon earth: who feel, for once, in the great aggregate, we have placed agriculture in the front rank among all the leading interests of the world; and, without pressure upon the laborer—without stinting him to penury and want—plenty for ourselves—millions to spare to vast communities elsewhere, constantly voracious for more; whose only apprehension seems to be that we cannot make as fast as they want and consume—gives us, indeed, a proud eminence and dignified position. To our agriculture are we indebted for the most important position we occupy. To our slaves, for raising ourselves above the deplorable condition of pressure and ignorance that marks the condition of every other agricultural people. We are indebted to Providence for unexampled advantages and blessings. We must be held accountable for such beneficent grants, and prove ourselves worthy of the heritage. We cannot mix up our interests, distinct as they are, with the envious, hostile, and confused views of general welfare that exist in other sections of this country, or the world at large. We must take care of ourselves, or, rest assured, no one else will. What is our position? We (probably, of all the world,) strictly retain the time-honored, the God-sanctioned relation of master and slave.

In the heroic periods of the past, we see immense Empires, gigantic Dynasties, powerful Republics, dawning, brightening, effulgent, and then going down, either in clouds or splendor. But as we trace their career, the maximum of greatness has invariably been reached by the happy adjustment of society, in which the relation of master and slave developed its utmost capacity. Nor has the success of more modern nations, equally distin-

guished, proved that society can ever advance without the same relation in spirit, if not in form.—The white slave, pent up in crowded masses, working from pressure and hunger, under the artificial and despotic tyranny of capital against labor, yields to wealth a revolting power of absolute dominion over mind and blood, whose capacity to aspire is equal to those who master them. The struggle at some points is terrific; but power almost invariably conquers, and humanity sinks deeper in the slough of despond. The beggars in rags, in rabbles follow the prosperous; the flaunting colors of infamy disgust the eye and ear. The mine, the loom, the forge, send their products to the common stock of human wants, bedewed with the tears of suffering and sorrow—the sighs of those who know no friend in sickness, no consolation, as in filth and wretchedness they sink like beasts into the grave. We do not exaggerate the picture; it is drawn from recorded life, and should make the hypocrite who ejaculates a prayer of thankfulness, that “he is not like other men”—who professes a holy horror that man should hold property in man—feel rebuked, that in the midst of such crying evils, he could hope to conceal, by an attack upon others, the deformity of his own society. But if they are satisfied with their society, it is their own look-out—let them make the best of it. We are content with ours, and believe the contrast, at every point, is in our favor. We complain of impertinent interference; and when the plea is, that they feel responsible for the great sin of slavery, because we live under a common government, which they say is a consolidated Empire, each part being merged in the whole, making the Union omnipotent and sovereign, and the States, ephers and appendages. If this is their creed and justification, then, for one, we say, away with the Union. If they have no plea to justify their hostility but love for the negro, and hate for the white man who owns him, then we, slaveholders of the South, cannot love any Union, when three-fourths of the hireling States are arrayed against us; and the moiety of them that, from policy only, sustain party relations to get power and patronage, but freely say negro slavery is an evil, and its existence but a question of time.

Now, what is the pressure of all governments, through taxes and legislative extortion, against the cultivators of the soil, grinding them to poverty, and exhausting them, to support favored interests, harsh and deplorable as their fate is, in comparison with the condition of the Southern farmer and planter? They not only are oppressed by an incessant drainage of their means, forced by unequal

laws, to sustain pursuits, whose prosperity and strength, as it increases, is used to crush the only means by which the people of the South can raise the large sum that is annually collected from them, and cultivate a region requiring particular labor to make it inhabitable to the white race.

The agricultural interest of the South, then, has more to contend against than any landed proprietors in the world. If they lose in the tumultuous struggles that now agitate the encircled feelings of the civilized world, they become outcasts—without home, without respect, without pity for their destitute condition. The question then rises to overwhelming importance, and the agricultural condition of the South, when properly considered, embraces inquiries of solemn import, that reach far beyond the inquiry, how the soil can best be cultivated; how the largest crops and profits can be made; what is the advisable plan to restore soil, and what particular crops should follow in rotation. All these, important as they are, sink into nothingness when we consider that the soil we have purchased or inherited, whose title is ample, so far as the regular record or transmission goes, is disputed by a power which unless freed from, will have the strength, as inevitably as fate, to take it from us, and at the same time before the tribunal of the public opinion of the world we will be held as a detested race, devoid of any claim to sympathy, ruined and hated. We are uttering the language of soberness and truth, as susceptible of demonstration as any proposition in Euclid, and which time, step by step, will march to its perfect realization, unless you have the nerve, the valor, the patriotism, to check by timely precautions, which can only be now effected, by bold and united councils, vigorously carrying into action your determination to save your families, your State, your property, and your honor. Anything short of this, any time-serving expediency, any hope of victory, based upon the elevation or ambition for men or party, whose supposed power to stay the danger is only deception and weakness, if done with ignorance and in good faith—if for selfish designs, it is treason to your blood, your position, your state and your posterity. Our first consideration as agriculturists, should be security for our property—the next to leave no effort untried to make from it the largest possible results, and to keep and increase its capacity to reward with every rotation of seasons, in proportion to the skill and attention applied. To do this, security for the future, use of so much time, care, and capital, is indispensable. The temporary motive of annual profits is not sufficient for permanent improvements. If

there is a high and noble feeling on earth, it is the one that prompts us to care for offspring, and leave them a legacy in character, name and property.—Close the mind of any man to this hope, and the present and the future offer no incentive to draw upon those faculties, whose use makes man a hero amidst the trials of life, just in proportion as he actively exercises and applies them. The field in all the southern section of this Union is wide and inviting to make the white race elevated and commanding, and their dependents, the black race, contented and happy. If one homogenous legislative interest alone existed throughout this fair region, the highest order of society would be attained, and all that great wealth, tempered by refinement and high tone, can effect, would conspire to elevate Southern society to pre-eminent position. Such is the incentive offered to the Southern planter to prove himself worthy of his high heritage. Much has to be done and undone before we can even attain simply the point of securing justice. Such are the complications that environ every effort to secure good government, that even the most successful tend to promote certain interests at the expense of others. We have on a previous occasion traced out some of the causes that have exhausted the South. Let the policy of a common bond of union be what it may, if a contract is made between communities for mutual benefit, and two great interests separate their identity, all you have to do to convert into a despotism, is to give to one side a preponderating influence, and also the power to construe and enforce the privileges mutually granted, according to their wishes. A better political receipt for a dominant interest to govern and oppress a weaker cannot be devised, and the gilded pill of tyranny may be called by any fancy name, but its inexorable decree usurps the rights and transfers the substance of its dependents, to consolidate and embellish its own power and section. It virtually owns, governs and uses the wealth of the partnership, and when the injured division refers to the articles of agreement, and adduces arguments that cannot be answered, the reply is, rely upon the Union. When it says, but you are ruining our agriculture by your unfair laws, prostrating our commerce by your monopoly of common resources, until our exhausted fields are spreading wider and wider, our cities becoming more and more lifeless—we are told, stand it for the sake of the Union.—When we say, but you make war upon the prop and stay of our whole form of society—you are organized against our negroes—every Northern State except five in your last Presidential election supported the cause of abolition, that is, went for the destruc-

tion of the property—and the recent elections have scattered like chaff even this small showing—yes, true, but fight the battle in the Union; it will save you. In fact, open the volume it will take to contain the catalogue of aggressions against us, and still the remedy remains the same—save the glorious Union! My fellow-citizens, let us begin to use the word—let us catch a slight from our enemies. Let us, too, go for Union—the union of the South, the union of part of the South, *the union of one State, if need be, for the sake of the South.* As human beings, we come into existence with mutual wants and cares, but at the same time each individual is responsible for transgression here and hereafter. Society is but an aggregate of individuals, and while we delegate for security sake certain rights to a controlling authority, under one form or another, and it is often assumed against consent, merging the individual in the mass, and the whole made obedient to the strong will of one supreme power, yet a single arm in history has been uplifted to strike for the freedom of all, or a battle of deliverance has often been fought and won, by the virtue and patriotism of the few, against usurpation and tyranny. One by one, we went into the Union, and constitutionally, we can only so go out. We have, thanks to the wisdom of some States in ratifying the Constitution, reserved the power to depart whenever we may wish, either with or without cause. If we have the right, the argument is exhausted, the application may involve the question of prudence and expediency, words that have cost the South dearly, so far, and may ultimately destroy her. On the one side is a great section preyed upon, plundered by oppressive laws, and although rich in agricultural capacity beyond any other people, at every point is she unduly depressed, because the powers of government live upon her, and force her by, insidious laws, to support, to give more for nearly everything she buys, that another section, of adverse interests, and unfriendly sentiments against her, shall prosper at her expense. This hostile division has nursed its hate, until without any other motive than jealousy, it is ready to see havoc and desolation lay us waste, rather than we shall peaceably retain our property. Now the question is, shall we submit, in the vain hope of a reaction in the tide of fanaticism, and love of power, or shall we resist, before we reach a lower point of degradation! At this point come in words that mean things. It is prudent and expedient to wait until all are ready, we are advised. A common interest prevails, and if one sovereignty is informed and ready, it is inexpedient for her to advance, because if she does, some of the others may feel hurt, and

refuse to co-operate. In meekness we have waited. As long as the Trojan war, seven long years, have we waited, since our own loved State, for expediency sake, bade us do so. She wished us to co-operate for the sake of effectual deliverance from tyranny, and was led to believe we would soon have issues that would whirl the whole South into our ranks.

We are now awakening to the momentous truth, that what is every State's duty, separately, becomes conveniently shifted, alterately from one to another, until, like the common adage, that what is every body's is no one's business, we have the prospect before us of waiting for an impracticable remedy, to redress grievances, that will not only grind our agriculture, but obliterate the planting interests of the South from existence. We ask if the statement is not a fair one, and if so, what consideration rises to the magnitude that the aspect presents to the consideration of the farmers and planters of South Carolina, and where do all other issues sink to, in comparison with this one? Will any one dare, in the face of the stupendous power that has gathered abroad, the hostile feelings in hireling States, the treachery at home against us, the growing and immense strength exhibited in recent elections, to persist in councils that postpone indefinitely all action, but introduces perpetually into our midst increasing elements of weakness, and fortifies the enemy in the certain assurance that we will ultimately fall an easy prey, if we hug the delusion any longer? You men who cultivate the soil constitute the South.—You feed, clothe, and support all the rest, few comparatively as they are. When we speak of the South, or your adversaries do so, you alone are alluded to. Now public opinion must either control or be controlled. If you feel that the central agency at Washington can save you, we ask where is your power there? None. Then we must look to a union of the South. Where is the evidence you can consolidate it to the point of joint action? None. The *National Union* has proven, so far, *stronger than the South.* The one has rewards, and captivating offices to offer—receives the immense treasures extorted insidiously from our portion, the South, to be disbursed among her enemies and her deserters, whose only hope to retain their ill-gotten power, is to strengthen the central government to the unwieldy proportions of an absorbing despotism, and to merge the imperial sovereignty of the States into degrading acquiescence, to every extortion and usurpation of their rights, which, strange to say, they succeed in effecting by stirring up discord among the plundered States, to a sufficient extent to pre-

vent their *united or separate action*. This game has been played out, and the harbinger of better times irradiates the future. The planting interest, lived and preyed upon—fleeced at one time, humbugged at another, is now organized for its protection. Chemical, geological and political sciences, are daily initiating thousands into truths, that furnish the foundation of Southern individual or collective prosperity. The more we are informed upon the latent powers that repose in our midst, the greater becomes our determination not to give up, without a struggle, such immense advantages. With security for our property and lives, for the present and future, we feel we can distance the whole world in competition. We have the climate, the soil, the productions, and better than all, the negro slave, to excel all other communities in agricultural pursuits. We realize thoroughly how it has happened that we have lost the position that climate and slave labor should have placed us in, and every day the light is rushing upon the minds of tens of thousands, who will demand the restitution of lost rights, or take their own affairs into their own hands. It is too late in the day to check this spirit by interposing catch phrases, or meddlesome issues. Country, family, honor and life hang upon the decision. Moral courage to boldly look the elements of seeming danger in the face without fear of consequences, will melt into mist, many a dark and ominous collection of fancied dangers, and every step taken in the right direction will confirm our strength, by silencing the antagonistic interest, that the federal power has created in our midst. Or if not, proclaiming to the South in trumpet notes, who are her friends, and who her sworn enemies. They must stand out without evasion; no hypocrisy to hide, no eulogy in defense of a detested tyranny to avail them, in advancing their own interests, over a prostrate and ruined country. The South, relieved from oppressions that have almost ruined her great natural resources, will then have the means to restore her exhausted surface, make her citizens contented with their homes, and exhibit a prosperity, from her agricultural capacity alone, that will attract wealth and refinement from abroad. With the few simple title and right to our land and negroes established, by holding them in our own hands, we will develop what to us at present, would be unexampled resources, by retaining all the wealth we make, to be applied to the acquisition of more. The energy of the few now struggling to cheer up the many, in spite of the oppression and wrong, will find, amidst a continually increasing prosperity, the circle of their influence perpetually enlarging, until every intelligent farmer

and planter will become an adept in applying the result that science continually presents to make the earth fruitful. The incentive to exercise mind and energy, will bring a flood of light to bear upon every department of practical management. When with the greatest intelligence, the richest soil, the cheapest labor, all tending to enrich home, making each State of the South the patron of learning, the abode of plenty, and the owner of beings, whose low intellect, and high physical endowments will always give powerful muscles, proving good treatment, and no mental resistance, in a state of society which will make their masters intellectual chiefs, and themselves contented slaves. Such a society, spreading itself over the broad plains and valleys in the regions of the sun, with heads to direct, labor to apply, will work out a destiny that will surpass all the glories of the past, and transfer the seats of civilization and renown, again back to their ancient abodes in the South, where in the past the Phoenician, the Egyptian, the Greek, the Roman, the Arabian, in the Old World, and the Inca and Aztec in the New, plainly show great deeds spring up as frequently under the fervid effects of climate, as the face of nature there expands in joyous beauty to present her choicest gifts to man, assimilating his character to hers, in ripening intellect and warmth of feelings that makes the heroic nature, and engenders love of elevation, of arts, science, learning, politeness and refinement. Climate and good government modify the human character. While the South may enervate the mind and constitution of the white race, if no incentive is given to exercise the intellect, it acts as the very reverse when causes operate to call into action its mental and physical powers. Hence all the great monuments of antiquity are to be found in the sunny South. All the great warriors, heroes, poets, historians, princely merchants, and distinguished cultivators of the soil, are to be found where the sun melts out the frigid temperament and contracted nature, and expands the heart and head, as the teeming creation around fills the eye with its glorious manifestations. In spite of power being transferred to cold climates, under systems who hold, as they claim, by Divine right, their own subjects, it is their dominion over, and intercourse with Southern people, that give them nearly all their boasted strength. Where would Great Britain be if deprived of the products of the South? An insignificant island. Where would Russia be, gigantic, growing Russia, who pants to bathe in the Bosphorus, and revel under the fig and date trees of a coveted neighbor, if deprived of her caravans to China, bringing teas and silks, her commerce

transporting Southern staples and luxuries? She would relapse into a hopeless barbarism, that no Peter the Great could revive. The South and her old honored patriarchal institution of slavery, the region whose history reads like a romance, full of fire, of enterprise, of generosity, and bold heroic deeds, is not only the fountain of civilization, but the stream that bears up the cause of human progress, as it advances into colder regions, and no nation in ancient or modern times, ever attained permanent distinction who did not either directly possess a warm and genial climate, or derive her chief resources from tributary regions that did. A cold and necessitous region always will develop those traits of character that look to more inviting regions to better their condition, and when a Southern people become, in consequence of their wealth, enervated and imbecile, then, and not till then, will a Northern horde pour down upon them. The idea of the Goths and Vandals invading Rome, in her great days, would be too absurd to be entertained—in her voluptuous and effeminate age, it became a stern reality. That the ungenial Northman will desire to exchange his repulsive and rigorous climate, for the attractive and mild latitudes where plenty grows almost spontaneously, and all things minister to the wants of man, is beyond doubt; and if he can find an easy conquest he will attempt it. But when the men of the South, while they enjoy the bounties of nature, made liberal by being immersed in the quickening sunshine of perennial warmth, train themselves to defend their homes, in manly pursuits they have always proven an overmatch for the inhabitants of frozen regions. The planters of the South, taught to command themselves and slaves, who are educated in mind, polished in manners—who handle horse and gun as if they were part and parcel of their nature, can this day defend themselves against the world in arms. A great staple to give active employment, negro slaves dependent upon them, an agriculture which brings, even now, more energy, skill, and intelligence to bear in the cultivation of leading productions, than has ever been applied before. The whole world dependent upon us, we independent of them, gives us the proud position of controlling the agricultural, commercial and leading monied interest of universal trade.—Such a people must be energetic, bold and commanding. But release us from the stupor and supineness into which these evil days have cast us, and at once, proud and defiant, we will claim and enforce all the prerogatives due us. Then our noble State will no longer fritter away her time in the useless struggle between citizens of the same State, agita-

ting the question, which part shall have power; but from the Blue Ridge to the Atlantic, the mountain, the middle and the low country, will, hand in hand, march to the glorious destiny in which common interests and hopes will unite them. The institution of slavery to be perpetual, the good old State to be renowned, and her old fields to be restored, her old feuds to be buried, her resources to be saved and augmented, to encourage education, honor, courage, and patriotism, and to put down the stigma of our times, sycophancy, demagoguism, and flattery: the pandering to the meanest and lowest feelings of our citizens, to obtain national position, which can only be reached by sacrificing and betraying them.

ESSAY ON CORN CULTURE.

Awarding a premium for "the best essay on corn culture," presupposes the quality of the land; for on rich alluvial soils, on first or second bottoms, or on new grounds, to prevent grass superseding the cultivated crop, is the chief essential towards securing an abundant harvest. It is almost axiomatic that good lands, under ordinary circumstances, will produce good crops; but to produce remunerative crops from barren lands is the problem, whose most economical solution should be the important idea in all agricultural essays. With this end in view, and believing, that experience is more reliable than theory, I propose, hurriedly, narrating my success upon a lot, one and a half acres area, since April, 1853—suggesting, in conclusion, the essential requisites in properly cultivating a corn crop.

At the time above mentioned, this lot lay denuded of its original soil, shaded partially by a scanty growth of sassafras, which was removed in preparation for a corn crop. After the usual tillage, only a few hampers of inferior grain were gathered in the Fall. In January, 1854, the lot was covered, broadcast, with leaves from the forest, and immediately plowed with a one-horse turn plow. Corn was again planted, and ten bushels of good grain gathered in the Fall. In March, 1855, the lot was again laid off for corn, and in the furrow was strewed a heavy dressing of manure—stable, cow-house, pig-pen and barn-yard—upon this, high beds were thrown, and the corn dibbled and covered with the hoe. With similar culture, and good seasons, twenty-five bushels were gathered in the Fall, in addition to a prolific crop of peas. In November following, 200 bushels of cow-house and stable manure, were broadcasted upon the lot, making a coating to the land, scarcely discernible a short distance off. This manuring was turned under, one and a half bushels of wheat sown and brashed in, without cross-plow-

ing. The harvest in June, 1856, was only eleven bushels, this being a memorable year in the history of the wheat crop. A half-bushel of "shiney" peas was sown on the stubble, and plowed in. In the Fall a fine crop of peas was gathered, and a heavy wagon load of beautiful hay, (pea vines and crab grass,) mown from the lot.

In January, 1857, five hundred bushels of barn-yard manure, (trampled leaves,) were broadcasted upon the lot and plowed in. In the last week of February, oats were sown, and in July, 30 bushels were harvested, "shiney" pea was sown on the oat stubble, which failing to mature in the Fall, in consequence of drought, were pastured upon. In the following December, 500 bushels of manure, stable, cow-house, and pig-pen, were again spread upon the lot, and plowed under. On the 27th March, 1858, the land was completely horizontalized, in five feet rows, for Peabody Corn; this furrow was sub-soiled, the corn dibbled thereon at three feet spaces, and covered by two small furrows, one each side.—A full stand came up and at the first hoeing was thinned out to one stalk at a place. By the second hoeing, every stalk had shot out succors, which were pulled off by the hoe hands, who did not know the value of them. During the last month, the corn was gathered, shucked, and measured, turning out fifty-six and a half bushels of good corn, and two bushels of rotten corn. I believe the crop would have been one-third larger if the succors had not been pulled off at the second hoeing.

One bushel of this corn and a few specimen stalks were on exhibition at the Fair Hall.

Horizontalizing is the first requisite in preparing land for any crop. That this can be done on moderately undulating land, does not admit of a doubt; but that it requires care, and imposes a troublesome task upon the planter, is equally certain. After this preparation for corn in five feet rows, beds should be thrown up with a two-horse turning-plow, followed in each furrow by a one or two-horse scouter. The later in the Spring this work is done, the better. The impressions of these beds should never be destroyed. In the rotation of crops, three cotton beds can be made to occupy the same space of two corn beds; and in sowing small grain every third water-furrow of the horizontal corn beds can be preserved to show the direction of the cotton or corn beds of the succeeding year. In thus horizontalizing the land for any crop, the work of one plowman and one plow, in one day, drawn by two mules, is more beneficial than the plowman and the same plow for two days drawn by one mule.

After the land is prepared, the corn should be

planted on the bed, either by dibbling and covering with the hoe, or by running a furrow, dropping the corn, and "boarding off." The loosely thrown up beds being porous and admitting the feeble rays of the sun in early Spring, become warmer than the water-furrow, and hence germinates the seed earlier. During a wet Spring, corn planted in the water-furrow is often drowned out; moreover, corn planted in a deep water-furrow, rises in its growth, with the beds thrown to it during its cultivation.—Corn has no tap root, and its feeders (roots) spread upwards towards the surface, rather than downwards towards the subsoil, even in alluvial lands. Sub-soiling corn land benefits the crop more by raising moisture from below, by capillary attraction, to the roots, than by drawing the roots down to the moisture. Corn is essentially a surface plant. Planting corn on the bed is also preferable to cultivating upon a flat surface, because in the latter case the barren clay thrown up from below is baked by receiving the direct rays of the sun, which prevents what might be styled the insensible perspiration of the earth, a process necessary to the healthful condition of the soil. In corn culture, the preparation of the land is more than half the battle.

The first operation in cultivating the crop is "siding," or running a single furrow on each side of and very close to the corn, with a long, narrow plow. Did time allow, this should be done with two mules, one walking in each water-furrow. The hoe hands should next follow quickly, to straighten up, thin out, and mould the corn. Ten days after, the siding furrow should be filled up with a twister, running as deeply as possible. In due time the hoe hands follow again, when peas should be planted on the bed, between each two corn stalks, and covered with the hoe. Many will object to this early planting of peas, but I have always found it the surest way to secure a bountiful crop.

If the planter has, as too many always have, a large crop to his force, pea planting must be postponed until the next plowing, when each half hand can drop in the old twister-furrow as many peas as can be covered by two plows. This plowing should be done with "scrapers," or "buzzard-wings," as shallow as possible, covering the peas and plowing the beds out and out. Ordinarily, this working lays by the corn crop; and if done with discretion, the crop may be laid by early in June. If, however, injudiciously done, or the season has been very wet, another plowing or hoeing may be necessary.

Corn should never be plowed after a rain until the ground is dry enough for grass to be killed, by being covered, or having its roots exposed. Too

wet plowing is a detriment to the land—injures the crop, and encourages the growth of grass. Most planters plow too often. One good plowing, properly done, at the right time, is more effectual in the cultivation of a crop, than the plowing of a whole season, if done improperly, and at the wrong time. If corn succeeds cotton, nine furrows should make the crop. I have known old planters to plow corn four times during its cultivation, running five or six furrows each time. This labor, expended in the preparation of the land, before planting, would have diminished the work of the hot season, at least two-thirds.

A corn crop is most easily cultivated after a cotton crop; a cotton crop after a small-grain crop, when the stubble or a green crop had been plowed in, in the fall; and a grain crop best succeeds a corn crop: the fourth year land should rest. With this rotation, the application of manures will improve the productive capacity of any land.

When the corn blades begin to turn without being fired, they should be stripped from the stalks, and cured for fodder. Many planters assert this to be injurious to the corn crop, and labor lost, because the dried blades are not worth the trouble of gathering—apart from the injury sustained by the corn in losing them. This must be an error; for I have known idle mules to thrive on four ears of corn at night, and fodder morning, noon, and night. Nor do horses or mules prefer any dry food to well cured corn blades, called fodder.

When corn is dry enough, it should be slip-shucked, and housed in the shucks. This acts as a preventive against rats, partially, and if each wagon load, when being cribbed, is slightly sprinkled with strong salt water, attacks from weevils may never be feared; and the shucks are thereby increased in value, as provender for stock.

Whether peas should be planted with corn, is a debateable question among planters; but I have yet to discover any injury sustained by the corn when peas are planted upon the same bed. I have planted acres of corn, side by side, some with, and some without peas, and have never found a perceptible difference in the yield of corn, the weight of the corn, or the value of the meal; whereas, the acres upon which peas were planted, surpassed the other in just the value of the pea crop.

In harvesting a corn crop, no standard of measurement exists; and hence great ignorance prevails among planters, as to the amount of their crops, or the number of bushels gathered. Some planters assert that they have made so many bushels of corn on so many acres, estimating the num-

ber of bushels by the number of wagon loads hauled in. And their wagon loads are said to contain from thirty to forty-five bushels; when the simplest calculation will prove this to be an error. A wagon body 12 feet long, $3\frac{1}{2}$ wide, and $2\frac{1}{2}$ deep, contains but 105 cubic feet. From this deduct one-fifth, because a bushel is one-fifth larger (almost exactly) than a cubic foot, and we have the contents of the wagon body 84 bushels; divide this by 2, and we have but 42 bushels of corn, on the cob; divide this again by 2, and we have but 21 bushels for a load of corn, in the shucks. When slip-shucked, from 7 to 10 bushels more may be put in each load.

One hundred and thirty ordinary ears of corn will make a bushel.

One hundred and fifty ears of "Peabody" corn will make a bushel.

Ninety ears of the "Roanoke" corn will make a bushel. I have, in the Exhibition Hall, a bushel of corn from seventy-four select ears of the "Roanoke" corn.

The shucks from fifty bushels of corn, will make a wagon load, which, in this market, is worth five dollars: hence, the shucks from a bushel of corn is worth just ten cents.

Respectfully submitted,

D. WYATT AIKEN.

October 27th, 1858.

PREPARATION AND CULTURE OF LAND.

"The prevailing error I think to be this: Too little work before, and too much work after planting."

The above quotation is taken from an article over the signature of "Clifton," in the *Cotton Planter and Soil* for January, instant. It contains, in a nut-shell, important truths. My design in sending up my annual contribution to the *Farmer and Planter*, is to go somewhat more diffusely into this subject.

On all sides it is agreed that plowing—stirring the soil—is necessary in tending our crops; but many do not appear to have any clearly defined object in doing so. It is a practice that has been handed down from sire to son; and the farmer of the present generation does it because he learned it from his predecessor. I do not say this sneeringly; great respect is due to long-established customs. They are, most generally, the result of matured and well-tried experiment; and I stand with those who are opposed to hasty and untested innovation. But this doctrine must not be carried too far: we live in a progressive age, and certainly have yet much to learn.

And now, Mr. Editor, I have opened up a subject which, properly discussed, would fill a volume; but

I must be short; a page or two of your journal is as much as I can claim.

Let us inquire, what are the objects of plowing? The first object of plowing is, to prepare the land for the growth of the intended crop; this is often called breaking up. What we aim at here, is, to prepare a bed loose enough for the roots of plants to spread in every direction. It is clear, then, that the soil should be finely crumbled, and loosened deeply; as deeply as the roots of plants are likely to go; this is the first object. The second is, to admit of the descent of rains and dews, so as to supply the necessary moisture. A third is, to admit the atmospheric air, which acts in various ways: 1. Germination cannot take place without it. 2. The decomposition of the vegetable matters turned under, cannot take place without it; and 3. It helps to liberate earthy salts, and to form new combinations, which favor (in fact, are necessary to) the growth of plants. Some of these modes of action, and their effects, are pretty well understood—some of them, perhaps, are not fully understood. But I have not room to enlarge. From the above, however, it will appear that *we should break up our lands thoroughly and deeply.*

THE MODE OF BREAKING UP.

Every one must decide this for himself. Much will depend upon the nature and condition of the soil. Generally, when there is a good growth of weeds, or other vegetable matter to be turned under, it should be done with a turn-plow, single or double horse, fallowed, when the subsoil is close, with a coulter or seooter, so as to loosen, but not bring it up. Very often, when land has been long plowed to a certain depth, a hard pan or crust forms at this depth, and this ought, by all means, to be broken up. When there is little or no litter, or where there is a tough sod of grass, the seooter or coulter is a very good instrument for breaking up; perhaps as good as any.

THE TIME OF BREAKING UP.

On this subject there seems to be much difference of opinion. I incline to think, that on all stubble lands, *when there is a good coat of vegetable matter*, the earlier it is turned under the better—early in the fall or winter, whenever and as soon as other necessary business will permit. By doing so, we expose the larvae of insects, which are apt to infest such lands, to the winter freezes—the frosts help to pulverize the soil, and the vegetable matter is undergoing decay, and producing various chemical combinations, useful to the intended crop. In clear lands, and perhaps in some stiff clays, even,

although they be in stubble, I would prefer breaking up late; so late as just to finish the operation at planting time. So much for breaking up.

To complete the PREPARATION for your crops, as soon as you are done sowing oats, commence laying off your cotton ground, with a deep seooter-furrow; on this scatter your manure, and ridge with two deep twister-furrows: finish the bed when you come to plant. For the corn crop, as far as your manure will go, adopt the very same process, except as to finishing the beds, and even there, if it is not already well broken up. In low grounds, the bed should always be completed before planting.—On my high lands—that portion which I cannot manure—my practice has been to run a deep horizontal seooter-furrow in laying off, and, on each side of this, about a foot distant, another deep seooter-furrow; thus leaving two ridges. When I come to plant, I open with a shovel, and cover with two seooter-furrows, splitting the two first ridges, and making one in the centre. *By this mode I have a thorough stirring of the soil when the corn is planted.*

CULTIVATION OR TILLAGE.

It is here that I think our farmers are most at fault. They prepare their soil for the easy spread of the roots and spongiolies of plants, and then, in their after culture, cut these off, as if they were useless appendages. If we study the mode of life and growth of the plant, it would seem wrong to the simplest apprehension, to be cutting off these feeders; and all sound experience (my own and that of many others) proves this to be so. The doctrine should be DEEP PREPARATION and SHALLOW CULTURE. To be more particular, I would recommend that the first plowing (before the roots have spread) should be deep; and especially if the preparatory plowing has not already been sufficiently deep and thorough. After the roots have spread, the plants will need all the nourishment the soil will afford; and we should be careful to do nothing that will interrupt the supply of food. Our culture now, should be surface culture. For this purpose, nothing answers so well as the judicious use of the hoe. This instrument, in fact, is now indispensable in the interstice between the young plants along the drill. Betwixt the rows, various labor-saving implements may be used to kill the young grass and weeds, and, at the same time, break the crust and open the soil to the influence of the dews and the atmospheric air. The nature and condition of the soil will best determine what these should be. In most cases, the sweep, or some of the various cultivators, which may now be had everywhere, will

answer this purpose very well. With these run over the crop every two or three weeks, until it is "laid by," which should always be before its great effort at fruit. Making has commenced. Let us not interfere now; pull off your shoes, and tread lightly, for we are in the Temple of Nature, where the great mystery, or work of fructification, is going on. All we can do is to lift a prayer, with the Poet of the "Seasons":

"Be gracious, Heaven,
For now, laborious man has done his duty."

LAURENS.

P. S.—Before I close, Mr. Editor, a word on the change of plan of publication of the *Farmer and Planter*: I think the change is likely to be useful, by inducing a more intimate acquaintance between low-country and up-country planters, and thus enlarging the knowledge of agriculture and agricultural instruments of both; and, also, by increasing and drawing the feeling of State pride to the support of the only Agricultural journal in the State. This feeling is more likely to rally around a central location than one on the border. I part with regret with my old friend SEABORN, whose manly struggles to sustain his paper against many difficulties, deserves the hearty thanks of us all. I hope and believe you will have a more easy time of it—that you will reap, and deserve to reap, where he has sown.

L.

THE TRUE SYSTEM OF FARMING

Trying to do too much, is a common error into which the farmer often falls. His great eagerness in striving to be rich, is doubtless the cause of his error. He is ambitious and energetic, and forms his plans on a large scale, too often, perhaps, without counting the cost. He buys a large farm and wants to be called a "large farmer," without understanding or considering the true elements that constitute a real farmer. He fancies the greatness of that profession, as is too often the common estimate, to be in proportion to the number of acres, not to say cultivated, but embraced within the boundaries of his domain. The fact is now being spread abroad, that a large farm does not make a man either rich, contented or happy, but on the contrary, the reverse of all these, unless well tilled, when his labor is rewarded by ample crops and fair success in the various departments in which he is engaged. No farmer can realize the full benefits of his profession without adopting a thorough system of culture. His success, commensurate to his wishes, always depends upon the manner in which he prepares his grounds, plants his seed, and rears his stock. Neither of these departments—which may be considered the cardinal ones of his profession—will take care of themselves. The soil may be rich, but it needs culture. His seed may be sown, but it should be in due time, and always

on soil well prepared and of a suitable quality for the production of the crop desired. His stock must be constantly cared for—it derives its thrift from the soil, and sends again to that soil the sustenance it requires, but this is not done in a loose or haphazard way. The farmer's care is required, and all his better judgment must be exercised in keeping up this system of reciprocal benefits that may be realized by every intelligent and industrious farmer.

Thorough cultivation and systematic attention to all parts of his business is indispensable to a good degree of success. The very corner-stone to this whole system of farming, is to do what you do thoroughly—nature will not be cheated, and never gives full returns to the half-way work that is practiced by vastly too many calling themselves farmers. If the land has been worn, the extent of that exhaustion, and the food required, must be first considered. When ascertained, the full measure of these requirements must be given, to bring out full returns. If the farmer has but a small stock, and consequently but a small amount of manure to replenish his land, it is obvious that but a small farm can be supplied with it; and good judgment at once dictates that to cultivate properly a large farm, artificial fertilizers must be used if good crops are obtained. And so with the labor; two men cannot suitably till one hundred acres of land, when the labor of two men, and perhaps four, might be profitably employed on seventy-five acres.

This is the great error in farming. Two men strive to do what four can hardly do, and thus thousands of acres are run over, half tilled, and producing half crops. The land is run over till worn out, sustaining, year after year, the unnatural tax, till its energies are entirely exhausted, and it fails to yield even a feeble crop, because its life is worn out. Much of the soil in Virginia, and other Southern States, is a type of this. Thousands of acres are lying entirely useless and exhausted, and will ever remain so, till the first elements of its power are returned to it. This process is fast going on in many of the *Western States*. The soil is treated like an inexhaustible mine; the tillers crying, give, give, give! till, in a few years, it will have nothing to give. The boast of the West is, large farms and large fields of grain; plow, sow and reap, is the business of western farmers, drawing out the very life of the soil, sending away in the heavy exports that are constantly going onward, without returning to the soil the food it requires to make it productive.

The light that is being spread abroad on this subject, is beginning to correct this practice to some extent, but in most instances very little is returned to the soil to keep it alive, till, after several years of continual cropping, it manifests signs of exhaustion, and ultimate barrenness. When tillers of the soil understand their true interests, they will cultivate no more land than they can do well. Fifty acres of land for tillage, brought to a high state of cultivation, pays better than one hundred run over in the way that many do.—*Jefferson Farmer*.

THOROUGH PREPARATION OF THE LAND.—No amount of manure, without thorough preparation of the soil, can produce profitable results.

REPORT

Of the Committee on Grass, before the Union District Agricultural Society.

"ALL FLESH IS GRASS."

The introduction of Railroads into a country, is almost sure to revolutionize not only its agriculture, but the tastes and habits of its people. The proximation of the town to the country, makes the inhabitants of each acquainted with each other's wants. The town longs for the comforts of the country, and the country sighs for the luxuries of the town. New demands stimulate industry, and increase production. Consumption ever pressing upon supply, creates new wants, and develops new resources.

In no one thing, perhaps, is the effect more striking, than in the increase in consumption of fresh meat. The remote, and hitherto almost inaccessible mountain ranges, being drawn nearer to the cities, such wants might be easily supplied, but demand has pressed upon supply so steadily, that we find the price advancing, instead of receding, with all the facilities for transportation. The cattle-dealers of Baltimore, Philadelphia, and New York, have agents exploring all the mountain coves of the Blue Ridge, from the Potomac to the Look Out mountain. There is hardly an animal over three years old to be found in the whole range for sale.—There will be an increasing demand for beef and mutton, as long as Railroad facilities are being multiplied throughout the country, and it is already leaving an interesting inquiry—how are the people to be fed on the most economical system? Bread and meat are becoming daily more costly, and new means must be sought out by which the larder can be filled without trenching upon the corn cribs.

"All flesh is grass."—We cannot grow beef and mutton profitably, unless we can grow grass.—There can be no mistake about this proposition.—There is no doubt we are woefully deficient in the means to grow grass, and most culpably negligent in our effort to improve our condition. What can be done? that is the question. The large area of old fields turned out over the country, furnish nothing but broomsedge. Broomsedge is one of the kindest and most devoted of our friends. It protects the soil from washing, from the sun, from crumbling away by freezings, and furnishes a very good pasture grass for young animals. It contains the mineral elements necessary to build up the bone and fibre of the animal, but has not the property of laying on fat rapidly. Bermuda is more nutritious, equally hardy, and more palatable; but the difficulty of keeping it within bounds, will always be an insuperable objection to its general introduction. There is no other native or foreign grass that will stand the same amount of grazing and footpressure, as the two above mentioned.

There are some other varieties of native grass—particularly a broad-leaved purple grass—that afford excellent pasturage, but they are confined to particular localities, and not adapted to general introduction. We have no native grass which will answer for winter pasture; and this is really the greatest difficulty to be overcome; nor have we

been successful in the introduction of any foreign grass well adapted to the same purpose. On tenacious clay soils, wherein lime is abundant, red clover flourishes very well, under occasional doses of plaster of Paris. But it pays best when cut down and fed out to animals. In this climate, on soils not rich in lime, and subject to excessive droughts, it is almost invariably ruinous to clover to allow any animal but a hog to graze upon it. It pays admirably for hog pasture, though, and everybody should endeavor to have a few acres well set. It will keep hogs fat during the winter, and furnish a large amount of nutritious food for soiling in spring and summer, as well as hay.

No man need expect to succeed with clover, on poor land, and under poor treatment. The soil should be tenacious, pretty fertile, and deeply and thoroughly plowed. Sow early in February, on oats or wheat, and roll in. It will do well without rolling, if sown in showery weather. After the wheat is taken off, dust about a bushel of plaster per acre over it when the dew is on, so as to give the clover a start. Do not let any animal graze upon it the first year; and if the weeds spring up pretty rank, mow them down when in bloom. Two gallons of seed per acre will be generally enough; and if the soil be moist, a bushel of red-top may be added.—Buy Western seed if you can—Northern clover seed is generally full of the seeds of such pests as smut grass, wild carrot, narrow plantain, and the like; all of which are worthless for pasture, and soon take the land.

For moist, boggy soils, we have found no grass as hardy as red-top. It affords, in this climate, a pretty good winter pasture, and will yield a very good crop of hay. It should be sown in the fall, upon ground well broken up, and clean. When it is once well set, it will take care of itself. We have found orchard, rose, Planford's Rocky Mountain, and many others, wonderfully lauded by seed-sellers—only fit for pet patches, under the direction of amateur grass fanciers—very expensive luxuries upon a plantation, and generally ending in disappointment. The "Means Grass," for soiling purposes, would be invaluable, but it has such an ineradicable fancy for taking possession of all the good land in the neighborhood, that it would be hazardous to introduce it upon a plantation.

For soiling purposes, few things surpass the Chinese Sugar Cane, which can be grown upon good soil to almost any extent. Lucerne is also an admirable grass for soiling, but it requires rich land and careful cultivation, until it is well set, before it yields abundantly.

One thing, however, should be borne in mind—that to be successful in any system of grass culture, attention must be paid to it. It must be made a part of the business of the farm, as much as growing corn or cotton. You must secure a stand, and you must keep down weeds and native grasses not desirable, until it is well set. You must harrow, and top dress with manure, when it needs it, or your grass will soon run out. He who expects to succeed by sowing carelessly on poor soil, and leaving grass to take care of itself, will reap nothing but disappointment.

R. J. GAGE, Ch'n

THE USE AND VALUE OF GUANO.

The following article from Dr. D. Lee, of the *Southern Cultivator*, will be found highly important to all who interest themselves in the subject:

Guano comes in bags, and usually contains many lumps which require to be crushed into a powder before the manure is applied to the soil. The lumps are commonly separated from the mass by a riddle or sieve, as lumps and pebbles are separated from sand in making mortar; or as grain is sometimes sifted by hand. The ammoniacal dust that flies off in this operation, is pretty severe on the lungs and eyes of the operator, and is avoided by moistening the guano ten or twelve hours, or a day, before the sifting begins. The dampness should be barely sufficient to keep the dust from being diffused through the atmosphere. The lumps sifted or riddled out, may be moistened a little more, and crushed, as in making mortar, with the back of a hoe, or shovel, on a plank floor, or smooth hard ground.

For corn, it will probably pay better to put the manure in the hill or drill, than to scatter it broadcast over the ground. After the field is ready for planting, let hands take guano in buckets on their arms, and with the two fore or first fingers and thumb of each, take out a good pinch of the *snuff*, and drop it where the corn is to be dropped, spreading the guano, and covering it with a little earth, by using the foot for that purpose. The track of the manure-dropper tells where the seed should be placed; while the earth between the guano and corn prevents the causticity of the former doing injury to the germ of the latter, which, when it begins to grow, is tender, and easily killed.

The above hints apply to the use of guano in cotton culture, not less than to the planting of corn. But as cotton seed are usually scattered liberally in drills or rows, one way only, we should not hesitate to scatter in the same furrow, or marking, guano equal to 200 or 300 lbs. per acre, and cover both seed and manure at one operation. A few seeds might be damaged or killed by the manure, but enough, and more than enough, would grow.—No injury has ever resulted from sowing guano and wheat together, and the covering both with a harrow or plow.

It is only the soluble salts in guano that can injure any seed; and before the germ starts out, the salts, being at once dissolved by the damp earth, become so diffused and diluted, that no injury can be done to the young plant. If the soil is dry where the guano is placed, the result might be different. In dry summers, this hot, caustic fertilizer does more hurt than good. In the Patent Office Report for 1851, the reader will find a great deal of information on this and many other important subjects, showing the best practices in farm economy. On page 252, Mr. Zook, of Pennsylvania, gives an account of sowing broadcast, 2,000 lbs. of guano and 1,000 of gypsum on a poor field, badly worn by seventy years' cropping, containing fifteen acres. The manure was sown immediately after the corn was planted, and the ground harrowed when the corn was two or three inches high. The cultivator was afterwards run between the rows.—The yield was *fifty bushels per acre*. This crop was made in 1848. In 1849 the field was sown to

oats, and turned out over forty bushels per acre.—Mr. Z. estimates the gain from the guano and plaster, at 300 per cent.; cost per acre, \$4.50. Mr. Mumma, of the same State, speaks highly of plaster used on corn, and commends the free use of lime. Of the latter he says: "So powerful is its effect on poor soil, if properly applied, that on many farms in this country where it has been used, the value of the land has been increased 200 per cent., with less than 100 bushels per acre." Mr. Houston, of Delaware, applied 300 lbs. of guano per acre to seventy acres of wheat, in 1851. He prefers plowing it in six inches deep. He says that lime pays better than guano, taking ten years together. But he gets lime cheap, and guano is expensive everywhere.

His large experience induces him to say that 100 lbs. of this manure will give ten bushels of corn on poor land. Mr. Wright, a very successful farmer of Delaware, says that guano is too high for profit to the cultivator. Mr. Walsh says: "Guano is also used on our corn crop, but not to the same extent as to wheat. It is applied, generally, to the land previous to its being flushed. Sometimes, after planting the land, it is sown upon the furrow, and then harrowed in, either way. It adds materially to the gain of the crop—increasing it, I should think, when 300 lbs. are used, at least two-fold."

Mr. Charles Yoncay, of Buckingham county, Virginia, says: "In the fall of 1850 I purchased ten tons of guano, plowed it under, as before stated, (three inches deep) using about 200 lbs. per acre, and seeded wheat, leaving occasional beds not guanoed. Verily, the eye said the guanoed wheat would yield double."

We think favorably of the following practice of Mr. Y., although, from the drought last year, it was nearly a failure: "The ground, when prepared, was checked in squares three feet four inches; a table spoonful of guano was scattered upon the check; the hillings closed up to prevent the escape of the ammonia; the hills were cut off four inches above, and planted in May. The drought prevented the plants taking root, or bringing the guano into solution. There was no growth whatever until the 27th July, when we had rain; the growth was then in a week wonderful; the plants attained a fine size. A second drought occurred in September and October, which protracted the ripening, and the plants faded and assumed a yellow hue." Mr. Yoncay regards guano as a powerful stimulant, but too expensive for general use. Our notion is, that one may use guano to make a crop of corn at a profit, if he will make the corn pay a fair price in meat, and yield as much good manure for producing a second crop of corn and meat, as the equivalent of the guano. In other words, this costly commercial manure cannot be profitably purchased to grow corn for commercial purposes; but for home consumption, where all the elements of the seeds, cobs, blades and stalks may be saved as manure—the equivalent of the guano, and more too—this dung of sea-birds may be brought to increase one's corn, cotton seed and lint.

A CURE FOR STRING HALT.—Bathe with warm vinegar and sweet oil, and rub well the part affected.

KEEP A PLANTATION RECORD.

It is to be regretted that so much of what is learned by observation and experience, should have no more permanent record than that of the memory. That whilst new facts are occurring, and new opinions are forming, that much that is valuable in the past should be obliterated. So that knowledge, which should be always accumulating, often turns out to be little more than a substitution of new ideas for old. To be practically wise, and to leave the benefits of that wisdom to others, we should adopt some plan by which we should have access to the old as well as to the new thoughts and observations which we may have made. It is often worth as much to us to know where we have erred, as to know how we have succeeded. This knowledge can never be fully available, unless we have some record to which we can refer; and we therefore advise that all planters and overseers shall make full notes of the business under their charge. Our interest, as well as our information, is greatly increased by entering into the details of our business. Set down the number of hands, and what the real effective forces. The size of the crop—how many acres in corn—how many in cotton, small grain, &c. The size of each field—the character and condition of the soil—whether old land or new, upland or bottom, soft or hard, and in what to be planted—how many plows you run—what kind, and the character and condition of the team. Here you have a sort of programme of the year's operations, and, when accomplished, you will know what, and how it has been done, and with what sort of instrumentalities; valuable information may thus be derived, and you will be prepared to speak and act understandingly, in determining the question of ability to cultivate or not such a crop with such a force. This information will be still more complete, if, in the progress of operations, the time and manner of preparation, as well as the time and manner of planting, shall be fully noted. Also, when and how the crop was worked—its size at particular dates, and when and how much it rained, or what may have been the peculiarity of the seasons, and their effect upon the crop; and when, and under what circumstances the crop was laid by. These records of the events of each day, with suitable comments and remarks at the time, cannot fail of benefit to all those who make them—and in a series of years, if preserved, become valuable for reference. And we would not stop here, but note the absence of every operative, and the cause of such absence, each day, and let that report be read out publicly at the end of each month. Then it will be seen who have been at their post, and who not; and the inquiry will arise as to the sufficiency of the excuse of such as are frequently absent, and their own shame, and the sneers of the faithful, will make hypocrisy a thorny garb to wear, and provoke those who have the work to do, to lift the veil and let the secret out, if deception be practiced; and if disease be really the cause, the attention of the superintendent will be constantly directed to the necessity of proper care and treatment. The number of cattle, sheep, goats and hogs, and their condition, ought all to be noted, and these accounts carefully revised at least once a quarter.

In gathering the crop, careful note should be taken of all the operations, showing the time of gathering and the results, at least as far as to know what each field has done. This, and much more, ought to be done; and none who do it will regret the labor, or feel that it has been lost; and though it may seem a task in the aggregate, to the unskilled penman, when the labor of each day is divided out, it will not be burthensome, and soon become a pleasant and interesting work.

PEACH BORER PLASTERED UP.—Having in my garden a very vigorous peach tree, and observing that it was very much affected by borers, especially in the forks of the limbs, I began to cut them out. Still I was afraid that this operation (to be performed in many places) might injure the tree; and as I had some very fine, almost pure white clay prepared, I plastered the limbs of the tree with it, and closed (when the plastering cracked in becoming dry) the cracks by rubbing them over with a painter's brush, dipped in water.

The plastering became hard enough to withstand the effects of rain for several weeks, after the lapse of which all the borers were dead. The wounds caused by them healed quickly over, and the tree is as healthy as it can be.—*N. E. Farmer.*

TO DISTINGUISH GOOD EGGS FOR SETTING.—All those having setting hens would do well to take notice of the following remarks, and they will have a chicken for every egg they set:

Take eggs not more than three or four days old, and have a candle or lamp, hold the egg in one hand with the broad end upwards close to the candle; place the edge of the other hand on the top of the egg, and you will immediately perceive the incubation end. Some people can tell a pullet from a rooster. The mark for a rooster is crosswise, and a pullet lengthwise. Another way is to place your tongue on the large end of the egg, and you will find a strong heat if fresh and good, and the less heat if old and doubtful. Eggs put by for hatching should never be put in a very damp cellar, as the dampness destroys this heat.

CARBON.—Carbonaceous matter in some form is necessary in all soils. In some it arises from the decay of green crops; for the result is carbon, (charcoal) as thoroughly as if burned in a close vessel. Part of the results of decaying manures exist in soils as carbon. Old charcoal hearths, charcoal dust from locomotives, and all other sources, are valuable to supply this desideratum to the soil.—Soils are retentive of manures only from the presence of carbon or alumina.—*Working Farmer.*

SEEDS will not vegetate unless within the influence of moisture, air and heat; be careful, therefore, not to sow your seeds too deep, or they will never come up.

When shrubs produce an abundance of foliage, but no flowers, either move them to a poorer soil, or cut through some of the principal roots.

All plants have a season of rest; discover what season is peculiar to each, and choose that season for transplanting.

The Farmer and Planter.

COLUMBIA, S. C., JANUARY, 1859.

OUR OPENING ADDRESS.

In assuming the proprietorship of the "FARMER AND PLANTER," we are not unmindful of the responsibility of our position, or the difficulties which lie in our path. The failure of Agricultural journals in South Carolina, has come to be so much a matter of history, that it is unnecessary to offer explanations.

The "FARMER AND PLANTER" is the only Agricultural journal which has been sustained for any considerable period, by patronage sufficient, even to pay expenses. It has earned for itself a reputation for honesty, frankness, and earnestness, in everything touching Agricultural improvement, which it will be our aim never to forfeit. Devoted to the interests of South Carolina, identified with her in feeling and principle, and anxious for the encouragement of every enterprise which can advance her prosperity, we pledge our best efforts to produce a journal of which every citizen may well be proud.— Its columns shall never be tarnished by personalities, nor prostituted to the propagandism of humbug.

It shall be devoted to the improvement of *Southern Agriculture, Horticulture, Arboriculture and the Mechanic Arts*, as well as the cultivation of those nice tastes which add to the attractions and to the usefulness of home life.

And although we appear with a new head and a holiday dress, we trust that we will be none the less welcome or instructive as a monthly visitor.

It is hardly necessary to appeal to the old patrons of the "FARMER AND PLANTER" for their support; they have enjoyed its companionship too long to be willing to part company. But we must entreat them to aid us in adding new names to the list. Placed in a more central position, we will be able to present a more attractive journal; but to be such as South Carolina should have, it should boast of more patronage. To the many capital writers who for a long time have contributed to the columns of the "FARMER AND PLANTER" we will be more than pleased to offer our assistance in enabling them to expose error or to diffuse light.

As our Journal will quietly steal its way into the remote corners of society throughout the State, its columns will offer an admirable opportunity for advertisers to reach the eye of the people, and we will be most happy to serve them. To our friends we offer the salutations of the New Year, and the hope that we may journey through it together with mutual pleasure and profit.

NEW SERIES, VOL. I.—3

OUR FIRST NUMBER.

We shall not attempt to apologise for the delay in issuing the first number of the New Series of the *Farmer and Planter*. Our intention was to present one of the handsomest Agricultural journals, in the South, at least; and to enable us to do this, we have purchased an entire new printing-office. Those who know anything of the troubles and delays incident to the commencement of such an undertaking, we think will give us some credit for industry, when we inform them that our type was not ordered from Philadelphia until about the 6th of last month.— For the promptness and correctness with which our orders, for type and paper, have been filled, we are indebted to our friend, Mr. JOSEPH WALKER, of Charleston, whose kindness on this, as on many former occasions, will ever be remembered by us.

Of the appearance of our first number, we will leave to the judgment of its patrons. We think it very respectable.

Its contents are not so varied as we could desire—which may be accounted for in the fact that we have been thrown almost entirely upon our own resources, and the favors of friends who have kindly loaned us their late agricultural journals. For these favors we return them our sincere thanks.

We hope our exchanges will bear in mind that the *Farmer and Planter* is now published in Columbia, S. C., and direct their journals accordingly.— At present we have been favored with but few of the District papers of our own State, and not a single one from any other point has reached us.

OUR PROSPECTS.

Since it was first announced that the *Farmer and Planter* would be issued from Columbia, we have received so many encouraging and *substantial* congratulations, that we enter upon our responsible duties with great confidence that we shall be well sustained. Already the subscription list is sufficient to guarantee its continuance for this year, at least, and we feel assured that the Farmers and Planters of the State will rally around us by thousands more before the close of the present volume.

To the many inquiries made of us, whether the *Farmer and Planter* will be continued, we say, yes, without any doubt; it has taken a new growth, and if its friends will send us the *proper sustenance*, we will nurse it carefully and diligently, and every month forward to them a bough profusely laden with specimens of its pleasant and valuable fruits.

OUR NEW HEAD.

We are compelled to omit a full description of the new and beautiful engravings that appear on the cover and at the head of the first page of the *Farmer and Planter*, on account of the delay in getting them from the engraver. It shall appear in our next issue.

BOOTS AND SHOES.

The quantity of boots and shoes required for the consumption of the United States is not far from 75,000,000 pairs per annum. Of these 12,000,000 pairs are made in Massachusetts, at a value of \$40,000,000 per annum, and they employ 45,000 men and 32,826 women. One-half of this employment is in Lynn, which is the largest shop in the United States. The next is in Philadelphia, which makes \$4,000,000, mostly fine work, while that of Lynn is coarse work. The production is great in every city, town and hamlet of the Union, and the whole value is not less than \$80,000,000 per annum. In Philadelphia there are 457 manufacturers, whose aggregate sales amount to \$4,141,000, and Philadelphia sells perhaps \$10,000,000 worth of Eastern work in addition.

We clip the above from the *U. S. Economist*, and would call the attention of our readers to the startling facts enumerated. Just think of \$20,000,000 being annually paid to the manufacturers of one town in Massachusetts, (Lynn,) by Southern slave-holders—and there is no section of New England from which the South hears more cant or more bilingsgate abuse for her institution than Massachusetts. But with all their psalm-singing and platform eloquence against the awful sin of slavery, it seems they are willing to pocket the *profits* of the *institution*.

But is it not a question worth bringing home to our own people, whether it be better to manufacture our own shoes at home or to pay this tribute to our enemies? Would it not be better policy for us to pay even more to a Southern shoemaker for a good article, than to be imposed upon by split-leather, poplar-shaving soles, paper bottoms, and all manner of cheateries? Can we not work up our raw hides profitably into leather, and encourage the manufacturing of harness, shoes, and a thousand other employments which would be benefited by the operation?

FALLING OF THE WOMB IN Cows.—I saw a request for any person who had any experience in the case there mentioned, (falling of the womb,) to give the same. I had a very fine cow a few years ago, which was in that situation, and I took some warm water and cleansed the protruded part, and replaced it as well as I could, but could not get it to stay there, until I took a stitch in each side of the outer part of the urethra, with a small cord and a strong needle, and tied the two ends together. I had to serve my cow thus about three times during three years, each time when she was about half gone with calf. I have advised some of my neighbors to do in the same manner, with success, so far as I ever heard.

A VIRGINIAN.

CURE FOR RINGBONE.—The following can be relied on: Equal preparation of oil of spike, British oil, and turpentine, mixed, with an infusion of liquid vitriol sufficient for fomentation—to be applied immediately—and remixed and applied every other morning, for three successive times—after which soft oil of some kind should be used to suspend the cauterizing effect.

J. K. W.

INSTINCT OF ANIMALS.

The La Crosse (Wisconsin) *Democrat* says: Everywhere upon our neighboring marshes, the musk-rats are building their winter houses, on comparatively light ground, or pretty much out of water. By the testimony of the "oldest inhabitants," this fact always foreshadows an open winter. If a hard, freezing winter is at hand, the musk-rats build low at the water, to keep under the ice. If an open or mild winter approaches, they keep nearer the surface.

We give the above for what it is worth; but there is more truth than poetry in the instinct of animals. A close observer will very often find out that the teachings of science are forcibly illustrated by the habits of the dumb brute. A sheep will always select for his lodging-ground the highest and barest knoll on the plantation—the very point where science teaches will be deposited the least amount of dew. Birds build their nest with an eye to the seasons.—A hog always foretells, by his actions, when a cold change is soon to take place. Nothing would be lost, at all events, by watching such things more closely, and learning as much as we can.

BUTTER MAKING.

There may be many ways to make good butter, but there is one way that will never fail. Have everything that pertains to it sweet and clean. In summer, a good, cool, dry cellar, is very essential.—Place the milk in pans in the middle of the cellar, on a shelf, not too close together, nor admitting, in warm weather, nor indeed at any time, too much air. Pans that are much the largest at the top are best, and those that hold from four to six quarts are sufficiently large. Invariably skim the milk before it is clabbered. It is best to be skimmed as soon as sour, which can be done in a tin cream-tub, with a tight lid, which will hold as much as you can churn at a time, and which should be kept on the cellar bottom. The best butter is that when the cream does not stand too long before being churned. It should be churned every other day, at farthest. Let the churn, in warm weather, be rinsed with cold water, and set in cold water while churning. Boiling water should be taken to rinse the churn when it is cold, and the temperature will admit, before cream is put in for churning. The best butter we have ever eaten, has been when the up and down churn has been used.

When the butter has sufficiently come, take up in a tray or bowl, work out the buttermilk, and then pour over pure cold water, working it through that; pour it off, and add fine salt—an ounce to a pound. When this is thoroughly incorporated, set it in a cool place, until the morrow, when it should be worked with the ladle until the buttermilk is separated, but not until it is greasy, when it is ready for packing. Keep the firkin covered with a thick cloth under the lid, while the firkin is being filled, is all-sufficient.

I deem saltpetre, or saltpetre water, on butter, highly pernicious. Butter is like many other things whose beauty and sweetness is much marred by too much handling. All know we can make butter white and of the consistency of cream, by beating. Hence, to churn too long after it has come, to work too much in water or out of water, will make white, rancid butter. A word to the wise is sufficient.—*Genesee Farmer*.

BOOK FARMING.

There is a class of men to be met with in almost every community, who cry out against "Book Farming." Go to this class and ask them to subscribe for any of the cheap Agricultural papers published in the country, and ten chances to one if they will not laugh you in the face, and call you a silly theorist. Undertake to hold an argument with them, to show them the advantages of reading good Agricultural works, and self-esteem will rise in a moment to such a prodigious height that they can coolly assert that they know already all that can be known about the art and science of Agriculture, and perhaps they may go so far as to claim that they are, indeed, wise above what is written. Such men have their hobby, and that is "Practical Agriculture."—Do they not know how to hold the plow, ply the hoe, swing the scythe, and handle the sickle? Can they not make pork and beef, butter and cheese, as well as the subscribers to your Agricultural journals?

Individuals who mount a hobby, so far as I have had the means of judging, are apt to be a little one-sided in their opinions. Once fairly-mounted, they set spurs to their charger, be he of large or small dimensions, and rush forward till they fancy a change would be for their interest and save the life of their jaded nag.

Practical Agriculture has long been the hobby of tens of thousands. It has been rode so long and so hard, that many have been forced to see that the old nag could not always hold out and do the highest justice to the parties who had been for long years spurring her on to the top of her speed.

For years, all along the route, one and another have been hopping off, and bidding adieu to the jade with her senseless *exclusiveness*, and have been anxiously casting about for a more correct theory and elevated practice.

But all the riders are not yet unhorsed. Notwithstanding the jade is old, and from long service is woefully galled, and is almost getting fresh stabs from those who have been regenerated and made believers in a sounder and more wholesome doctrine in agriculture, and who would gladly see her supplanted in the course by a nag of the improved blood, her still devoted riders, with their feet in the stirrups "clear up to their heels," and both hands clutching the mane, are spurring her on, vainly supposing they are in advance of all the rest of the world, and are to remain so.

Practical Agriculture, rightly apprehended, is undoubtedly of much more importance than mere speculative "Book Farming." Men may write books on agriculture, that shall be wholly destitute of practical principles, and, therefore, of no advantage to the practical farmer, or to any one else. There are, however, but few such works allowed to come before the public.

So thoroughly aroused has the scientific world become, upon the subject of improvement in our agriculture, that no work, destitute of real intrinsic worth, can long hope to survive the rigid ordeal to which it must be submitted, upon its first appearance before the public.

The class of Agricultural works that find least favor in the eyes of the so-called practical farmers, are those designed to elucidate the scientific principles applicable to Agriculture, such as Geology, Mineralogy, Meteorology, Chemistry, Botany, &c.

These sciences are all taught in the higher class of schools, and there is not one of them but is of more importance to the farmer than to any other class of men.

The practical farmer has before him, every day, the subject upon which they treat, and can he be any less a practical farmer, if he understands clearly the principles upon which he works, and which, adhered to, crown his various manipulations with success?

If the practical farmer, one the most ultra in his denunciations of "Book Farming," were desirous of making his son a practical mathematician of the highest order, would he commence the work by forbidding him the use of books treating of the science of mathematics? Yet the son would be about as likely to become a Euclid in mathematics without the study of mathematical works, as the father would be a good practical agriculturist without the study of works elucidating the principles upon which his business is based, and in accordance with which it must be conducted, to insure permanent success.

Those practical farmers who eschew books and the teachings of a well-conducted agricultural paper, are not so fool-hardy as to deny the advantages of books and papers in fitting men for the better discharge of the duties pertaining to other pursuits, and it is only because they take a one-sided and illiberal view of the matter, that they heap denunciation upon "Book Farming."

In many instances this view is taken, because the early advantages of men were not such as to fit them to appreciate the voice and teachings of science, somewhat abstruse; and early prejudices take deeper root and yield their most luxuriant growth in minds not sown in youth with better seed.

As I have before intimated, the number of the decriers of "Book Farming" is yearly growing less; and men only need to come to the light to have their short-sighted opinions and prejudices made manifest to themselves.

"Book Farming," as it is called, is fast becoming a simple record of successful experiments that have been made by *practical* men, with an equally simple explanation of the *causes* of that success.

Now, this is just what the agriculture of the country needs. Improved systems, and that *rationale* of them, nobody can find fault with, and everybody that adopts them, with a clear understanding of their principles, will be benefited. A clear understanding of principles and a diligent application of them, would be our ideal of a "Book Farmer," and of a

Ohio Farmer.

PRACTICAL FARMER.

CURES FOR SPAVIN.—Seeing an inquiry from a subscriber for cure for spavin in horses, I send you the following, which I have frequently tested, and have never known it to fail of effecting a cure on a young horse, if timely and rightly applied:

Take the root of the common poke, (*Phytolacca decandra*)—wash it clean, then cut it into thin slices, and boil it in urine till it becomes quite strong.—With this decoction bathe the part two or three times a day, till a cure is effected, rubbing it hard downwards with the hand. It should not be used so strong or so frequently as to take off the hair.

Another cure: Take camphor and dissolve it in spirits of turpentine, to be applied till the hair starts, but not to blister severely. Then let the horse rest a few days.

WILSON DENNIS.

NATIONAL ASPECTS OF AGRICULTURE.

"At the late Annual Fair of the United States Agricultural Society, which we attended at Richmond, many thousand persons were congregated. The exhibition was highly creditable. On the grounds and in the banquet-hall the ablest speeches were delivered. We rejoice in the success of this Association, and would like to see the South more largely interested in it as an important auxiliary to the State Societies. Recently, Virginia, Georgia, Alabama, Tennessee, South Carolina, etc., have been most successful in their State Fairs. The Hon. William C. Rives, in his address before the National Society, portrays in glowing colors the importance of their movements."—*De Bow's Review*.

In that enlarged and comprehensive view of American agriculture, however, which forms the province of the National Society, now holding its annual festival here in the bosom of Virginia, in harmonious conjunction with one of the Societies of the State, the agricultural interests of the different States are rarely presented in any relation of rivalry. Nature has so bountifully endowed the grand and teeming continent on which we live with diversified aptitudes and capacities of production, that the rural economy of the United States embraces almost every variety of culture known to the industry of man; and to each is assigned, for the most part, a distinct and appropriate locality, so separated and defined, as not only to avoid the danger of injurious competitions, but to make the productions of one minister to the natural wants and deficiencies of another.

'Tis thus that, in the beneficent arrangement of our national heritage, as an agricultural people,

"All nature's difference keeps all nature's peace."

To one region have been given the staples of cotton and rice, to another the sugar cane, to another a plant whose conventional use has made it an article of great and increasing commercial value, tobacco; one is endowed with peculiar advantages for the production of wheat, another for the grasses and live stock, another for wool, another for hemp, another for mining, another for timber. To all is common the great American cereal, Indian corn; but as its abundant production is almost wholly absorbed in its lavish domestic consumption, it gives rise to no serious or disturbing competition among the producers.

Never was the national agriculture of any country so all-sufficient in itself to supply every want of its inhabitants, whether for food, clothing or lodging—yielding in overflowing abundance the raw materials for manufactures, and multiplied and most valuable objects for profitable exchange at home and abroad—adapted, by the diversity of its productions, to render the different sections mutually tributary to each other's wants—thus encouraging that division of labor which, under certain limitations, is as essential to perfection in agriculture as in the other arts—and able to build up, by natural and spontaneous influences, properly cultivated and wisely directed, the vastest, the most complete and harmonious system of internal commerce which the world has ever seen.

In this great scheme of American agriculture, no one branch pretends to any special favor or peculiar prerogative above the rest. All stand upon the same broad platform of mutual liberty, and the security of skill and labor in the enjoyment of their

honest rewards. Each seeks its development, under the kind auspices of nature, in the soil and climate fitted for it, seconded by the creative powers of human industry and science co-operating with the free air, the bounteous rain, and pervading light of heaven.

We sometimes hear it said that cotton is King.—But the agriculture of America, as its political Constitution, is Republican. It owns no dynasty of privilege or power. If any one of those noble plants which constitute the chosen vegetable races of the New World, could fairly aspire to royalty, it would be that prince of cereals, Indian corn; a proud native of the soil, lifting high its imperial form and tasseled banner above all its compeers, and on the universality of its uses and its presence, founding a claim to universal sway. But the genius of American agriculture, whose vital principle is freedom, accords invidious pre-eminence to none.

It is in this catholic and parental spirit of equal regard for the agricultural interests and pursuits of all the States, that the National Society, of which you, Mr. President, are the honored representative and organ, desire, I am sure, to exercise its fostering influence. It holds its great annual meetings, in succession, in each one of the States, seeks, in co-operation with the local Societies of each, to stimulate and develop, to its highest perfection, the agriculture of each; and embracing thus, in the grand cycle of its progressive revolution, all the members of the confederacy, it warms and vivifies them all, like the bounteous luminary above us, by the rays of its countenance and encouragement.

Nor is it by its premium list alone, or, indeed, in any other noticeable degree, that this beneficent influence is exerted. It is by bringing together, periodically, at one common point of re-union, the agriculturists of the different States; enabling them to compare, personally, their different productions, their different systems of husbandry, their different modes of culture; making them conscious how much these very diversities serve to unite them by rendering them mutual customers and tributaries to each other's wants, instead of jealous and encroaching rivals: that they are the children of one great and glorious country, engaged in the same pious effort to make it fruitful, and prosperous, and lovely; to whom seedtime and harvest, the early and the latter rain, the palmer-worm and the canker-worm, bring the same joys or sorrows; and that they have only to know each other, and to commune with each other, to feel that they are brethren in sympathy and affection, as well as in interest and in duty.

There is one other effect of these periodical assemblages of the agriculturists of the Union, which I cannot forbear to notice. They are thus made sensible of their collective power and influence for good or evil, and of their consequent responsibility, in all that concerns the destinies of the Republic.—If there be any class of citizens, more than another, constituted, by nature and Providence, the guardians of a country, it is those whose daily pursuits and interests connect and identify them with the soil of the country, who are bound to the country by ties not readily or lightly dissolved, and who must meet inevitably whatever fortune, adverse or prosperous, may betide it.

Their tranquil employments, too, in the constant presence and communion of nature, and remote from those conflicts of human passions which agitate,

more or less, the crowded centres of population, prepare them, in an especial manner, for the calm and sober exercise of those controlling functions which, in Republican governments, devolve upon the great body of the people. The history of Republics, both ancient and modern, proves that the landed interest has, in all of them, been the conservative element, by which, only, liberty and order could be harmoniously united. The convulsions and revolutionary resorts, of which some of our cities, within a few years past, have been the theatres, are beginning to teach the same lesson here, and may produce the conclusion that in America, as elsewhere, Republican liberty, amid the storms and tempests to which it is exposed, will find its only safe anchorage, at last, on the firm foundation of the soil.

But, however this may be, the agriculturists of the United States, all will admit, have a deep and precious stake in the common weal, and a highly important part to play in the public duties of the State. Without indulging the remotest jealousy of the other great branches of the National Industry, a jealousy that would be nothing less than suicidal, for commerce and manufactures are the acknowledged and indispensable handmaids of agriculture, it is incumbent upon them, at all times, to keep watch and ward over those public liberties and interests, on the preservation and due care of which their own welfare so vitally depends.

Patriotism is a plant, then, whose growth should be encouraged by agricultural societies, along with those other plants which engage so much of their attention. It springs spontaneous in the heart of the farmer, and requires only light, and air, and free communication, to give it its fullest development.—It is in scenes like this that it grows and expands with fresh vigor, and we learn to love our country more, as we see how much it contains worthy to inspire a common sentiment of interest and affection. The mission of American agriculture is a moral, no less than a material one; and if we shall go forth from this meeting, as I trust and believe we shall, penetrated with a just conception of our noble calling in all its relations, fortified in our loyalty and devotion to a common country, strengthened and renewed in our social and civil affections, the week we have spent here together, in brotherly communion, around the domestic altars of Virginia, will be among the proudest in her annals, and be blessed with rich and enduring fruits to the cause of national harmony and union.

BENEFITS OF MACHINERY TO AGRICULTURE.

In order that labor may be productive, it must be aided by machinery. The farmer could do little with his hands, but when aided by the plow and the harrow, he may raise much wheat and corn. He could carry little on his shoulders, but he may transport much when aided by a horse and wagon, and still more when aided by a locomotive engine or ship. He could convert little grain into flour when provided only with a pestle and mortar, but he may do much when provided with a mill. His wife could convert little cotton into cloth when provided only with a spinning-wheel and hand-loom, but her labor becomes highly productive when aided by the spinning-jenny and the power-loom. The more her labors and those of her husband are thus aided, the larger will be the quantity of grain produced, the

more readily will it be converted into flour, the more readily will it be carried to market, the larger will be the quantity of cloth for which it will exchange, the greater will be the quantity of food and cloth to be divided among laborers, and the greater will be the facility on the part of the laborer to acquire machinery of his own, and to become his own employer, and to increase that diversification in the employment of labor which tends to increase the competition for its purchase.

It will next, we think, be quite clear to our readers, that the nearer the grist-mill is to the farm, the less will be the labor required for converting the wheat into flour, the more will be the labor that may be given to the improvement of the farm, and the greater will be the power of the farmer to purchase shoes, hats, coats, plows or harrows, and thus to create a demand for labor. Equally clear will it be that the nearer he can bring the hatter, the shoemaker and the tailor, the maker of plows and harrows, the less will be the loss of labor in exchanging his wheat for their commodities, and the greater will be his power to purchase books and newspapers to educate his children, and thus to introduce new varieties in the demand for labor; and each such new variety in the demand for that commodity tends to raise the wages of those engaged in all other pursuits. If there be none but farmers, all are seeking employment on a farm. Open a carpenter's or blacksmith's shop, and the men employed therein will cease to be competitors for farm labor, and wages will tend to rise. Open a mine, or quarry stone and build a mill, and here will be a new competition for labor that will tend to produce a rise in the wages of all laborers. Build a dozen mills, and men will be required to get out timber and stone, and to make spindles, looms and steam-engines; and when the mills are completed, the demand for labor will withdraw hundreds of men that would be otherwise competitors for employment in the plowing fields, the making of shoes or coats, and hundreds of women that would otherwise be seeking to employ themselves in binding shoes or making shirts. Competition for the purchase of labor grows, therefore, with every increase in the diversification of employment, with constant tendency to increase in the reward of labor. It declines with every diminution in the modes of employing labor, with steady tendency to decline in wages.

From the Genesee Farmer.

APPLYING MANURE TO CORN AND POTATOES.

"On the relative advantages of applying manure in the hill for corn and potatoes, and plowing it in."

I am greatly in favor of spreading and plowing in manure upon ground which is to be planted to corn or potatoes, instead of placing it in the hill, for several good reasons.

I would not place the manure in hills, because its effects are of small value to the crop of corn or potatoes. What possible benefit can a shovelful or two of unfermented yard or stable manure do a hill of corn? Two-thirds of the farmers use the manure made in Winter, for application to their fields in the Spring. It is nothing more or less than green manure. If the weather, after planting, should prove wet, it will be one chance in a hundred if the seed does not rot—corn, especially. If the weather is dry, the manure dries into a solid mass, and is more of an injury than a benefit. Should the season be just

right, the roots of corn soon grow beyond the effects of the manure, and leave it useless at the bottom of the stalks, where it can be of no use until the field is plowed again for another crop. If well-rotted manure is used, applying in the hill will do very well. Yet its effects are too contracted, and the full force of the manure is lost to the crop.

I am not in favor of manuring potatoes in the hill, under any consideration, as I believe it more of an injury than otherwise. I have always seen the best potatoes raised upon ground well manured for some other crop the previous year, especially late years, when there is danger of the rot.

My reasons for spreading and plowing in the manure, are, because it is where it can benefit the crop during the whole period of its growth. It is mixed with the soil, and within reach of the roots of the plant along its whole length, where it must be of more value to the plant than when placed in the hill. It is impossible for the manure, when placed in the hill, to influence the growth of the crop beyond the first commencement; and although an early start in Spring is very beneficial, yet would not that hill out-grow and out-yield, which could obtain a rich supply of nourishment for its plants, during the whole season, instead of the one which had a full supply during its early growth, but was stinted all the rest of the season, as corn and potatoes must be, when dependence is made upon applying manure in the hill alone?

E. P. B.

A NIGHT WITH THE MAN WHO DID NOT TAKE THE PAPERS.

[The following article appeared as a communication to the *Southern Agriculturist*, published by us in 1853, but has lost none of its force from long keeping, and we believe is equally applicable now as when first published. It contains arguments that may be of service to our friends who are striving to swell our subscription list, whenever they wish to convert those who decry what they call Book-Farming.—PROPRIETOR.]

It is a dismal day, truly, and as this cold nor-easter drives its half-frozen mist into every fold of our outer covering, we are forcibly reminded of the old Scotch Proverb, "That a wind fra the east blaws nae guude for man nor beast."

But we will draw our great coat more snugly about us, and, peering from beneath the visor of a weather-beaten cap, strive to find something more cheerful to think about than the weather.

We are drawing near a settlement—these old fields, grown up in pine and broomsedge, tell us that man has been here in times past. Now we approach fields yet full of dead trees and stumps, disfigured by bald spots and gullies. Wheat has been sown upon them, too—we know it by the stripes of deeper green running up and down the hills far away, as it fell more thickly between the cotton-beds.

The cotton-stalks stand high and low, and at about the right angle to throw a cradle-full of wheat to the wind at harvest time. On our left is a big clearing—"more fresh land for cotton, to enable us to rest the old land." Rest!! Wheat, pastured by every living thing in the neighborhood—corn, oats, and so on—this is the common rest. On our right, upon the highest point of the plantation, looms up a huge log gin-house, and the uncovered screw. Why do people

always select the highest point for a gin-house? and why are they always so hard run, that they cannot take time to cover a screw?

The piles of cotton-bales are arranged to show well—ten, fifteen, twenty-five, thirty-five and seven—forty-two—pretty good. These people are taking the cream out of the hills pretty fast.

Hard by, on the hill-side, are rows of low log pens which we take to be stables, from the head of a disconsolate horse now and then sticking out between sundry fence rails, which are jammed into certain apertures, intended, we suppose, for doors. A few colts lean shivering against the wall, amusing themselves by a search after a stray blade of fodder in the gable.

A wagon-body lies upside down in the yard, and the "running gear" stands taking it coolly with its tongue lolling out upon the ground. The yard is perfectly bare—no indications of manure-heaps or littering. At the gate, an interesting fraternity of razor backs stand squealing; poor fellows! this gloomy evening has made you anticipate Sambo's evening hoo-ee! But the odor insinuating our olfactories just now, as well as certain unmistakeable signs by the road-side, warn us that the "c'uppcn" is near; here it is on our right, on a bleak knoll, so as to be dry, we reckon. The remains of a few straw-pens, which, having been undermined, are tilted over about the lot, and the poor dumb brutes are scattered about, some trying to pick a palatable morsel out of the mouldy, half-rotten heaps, while others are propping themselves against the worm fence to keep off the wintry blast. It has always seemed to us that a cow must have a very strong imagination, or a great deal of philosophy, to think a worm fence a protection against old Boreas.

But here we are opposite the house—a two-story framed wooden building, 30 by 15, sheds and piazza to match. The front piazza is decorated by sundry strings of red pepper, seed bags, saddles, bridles, blowing horns, and tin pans.

Night is drawing her sable curtains round, and we must take such quarters as we can get. Our host meets us at the door, and ushers us into the "big room," where we find all the members of the family seated around a glowing green wood fire, before whose influence we soon find our humanities begin to flow.

The price of cotton, probability of rise or fall, increased production, horrid condition of the roads, railroad hopes, and enterprises of great pith and moment, were discussed in turn, till supper was announced. As we expected, fried ham and eggs, sausages, corn *light* bread, blue biscuit, cold pies and weak coffee, make the course.

After supper, we return to the blazing fireside. I glanced round the room, with the hope of finding a book or newspaper. Fox's Book of Martyrs, Remarkable Shipwrecks and Disasters, and Gunn's Domestic Medicine, made up the assortment. "Can you give me a late paper, sir?" "Well, I don't take any paper now; I took the *Brother Jonathan* a while, but them cussed Yankees got so ripping on abolition, that I quit the whole concern." Drawing the first number of *The Southern Agriculturist* out of our pocket, we remarked: "Here's a paper, sir, we picked up where we lodged last night, that promises to be a valuable acquisition to your department." "What paper is it, sir?" "The *Southern Agriculturist*, a paper—" "All humbug—I don't believe a word in

this book farming. I never seed anything in one of them papers but stuff about manuring, ditching o' hill-sides, subsiling, and sich like." "You don't believe in manuring, then?" "No, I don't; it'll do very well for gardlings, and turnups, and sich as that, but a body that plants a full crap never has time to be diekering about manures—its in the way of eveyrthing." "Don't you believe that one acre well manured and well cultivated, will produce more than two badly managed?" "Well, it might; but, like the Injun's gun, it'll cost more than it comes to. I can clear a piece of land and pay for it out of the truck made on it before I can bring an old piece back to what it was." "Granted; but, my dear sir, after you've paid for it, what is it worth? You've worn your's out paying for it, and just the moment your's is gone, mine is good for a bale to the acre." "Pshaw, stranger! that's all book farming; it looks mighty pretty on paper, but it won't work out the right answer. I tell you it *won't* do; I've got a neighbor who's always at it, and does nothing else; its manure, manure, subsile, subsile, and write for the papers; all stuff, sir; his crib's always empty, stock poor, and everything out o' fix, except his fancy patches—they're great; but there's the Injun's gun again pinting at you." "Granted, too; but, my dear sir, did that neighbor succeed better before he commeneced book farming?—did he ever succeed at anything he went at?" "Well, I can't say that he ever did." "That's the misfortune, my friend—whenever you find a humbug among the book farmers, it is trumpeted to the world, but when success crowns one's efforts, its, oh! he's a *practical* man.—Nothing is ever said of your practical humbugs.—Have you, my dear sir, no neighbors who never read a book, and still make poor crops?" "Oh, yes; but you see that's owing to bad judgement." "And it's bad judgment, exactly, that makes a bad book farmer—nothing else; the man who is not able to sift the chaff out of his wheat, we take it, will rarely get a good loaf of bread. In book farming, as in everything else—nothing should be taken for granted—the best of judgment, common sense, should be applied. If you put an inexperienced hand to work with a set of cabinet-maker's tools, the chances are that he will cut himself badly; he must become accustomed to their use, before he can employ them safely or profitably; so in farming—a man must, by the exercise of good common sense and observation, learn something of the practice and the nature of what's to be done, before he can safely or profitably apply the learning of books. But there is one thing I know we will agree in, deep plowing, what say you?" "I don't believe in it—its ruination to land—it turns all the clay up, and makes the ground hold so much water that it's never dry in the winter or wet in the summer. I never could make plowing and reading go together." "Well, don't you think if you had ditched those hill sides in your wheat-field over the way, you would have made more wheat and saved your land?" "I don't; it wastes too much land, these ditches; I'd as leave have 'em where nature puts 'em as man. This eternal turning and twisting about over a field, a body gets no work done, besides cutting your land all up and ruining the looks of the field into the bargain."

Beaten at all points, to the evident delight of the youngsters, who thought the old man had used us up right, we struck our colors, and begged to be put to bed; and after a night's immersion in a spongy

feather bed, with two little pillows for our companions—about as big as a goose-egg—in a shed room, neither ceiled or plastered, sundry vacant window-lights stuffed with old hats, our olfactories regaled by a compound extract of dried peaches, sole-leather, and ing'un sets, we dedicate to you, dearly beloved laborers in a good work, the benefit of our musings.

DOBBS.

RESOURCES OF SOUTH CAROLINA.

A correspondent of the Pendleton *Messenger* writes: ["What is it that we cannot raise that is necessary to subsistence, south of 36° 30'? We can grow as good corn, as good wheat, barley, oats, tobacco, rice, hemp, indigo, potatoes, and every variety of vegetable; and last, though not least, that great lever of the world, cotton, whose name is King. Salt, we are deficient in, but we don't obtain that article from the North; and as for coffee, we will filibuster about until we will have that article annexed. The culture of the grape is beginning to arrest the attention of many.] We were told by Dr. Togno, of Abbeville, who is now engaged, successfully, in making wine, that this country is well adapted to it.—All that is necessary is to understand it properly.—Some predict that it is the province of the grape to civilize the world—to supersede the use of mountain dew. In France, we are told, it is a rare thing to see drunkenness, yet they all drink wine, more or less. [All we want, then, to be a great agricultural people, is to reduce our farming more to a science. To cultivate less land, and cultivate it better, manure more, and clear less.] It is said that the article of guano will make a great revolution in affairs.—Fifty per cent. yield is what they estimate it at in the lower and middle Districts, where they are using quantities of it. [As regards the mineral resources of the South, every day is making greater developments. As for our manufacturing departments, we are sadly lukewarm.

["We must shake off that lethargy which has so long bound us hand and foot. It is true, we have some few in existence, but none, comparatively speaking, with what we ought to have. In many portions of the South, we have as fine water-power as there is any use for.] Then let us stud our streams with them, and no longer protect ourselves from the inclemency of the weather with Yankee garments; no longer hop the waltz, dance the polka, or cut the pigeon-wing with the Northern slipper or fine pru-nella; no longer sweep our floors with their brooms, or drink water out of their pails, and a thousand other things that we ought to feel ashamed of. In other words, let us whip them with their own weapons—beat them at their own game.] Let us disenthral ourselves as much as possible from them, and we will then bring them to terms; or, if not, when the day arrives for separation, we can, without inconvenience, fall back upon our own resources.—We only wish that Mr. Boyce's great hobby could be successfully carried out—direct trade, direct taxation. Let us all be equalized in making the revenue for defraying governmental expenses: not have a tariff for the protection of one-half of the government at the sacrifice of the other."

[For everything you buy or sell, let or hire, make an exact bargain at first; and be not put off to an hereafter by one that says to you, "we shall not disagree about trifles."

From the Cotton Planter and Soil.

OPINIONS OF IMPROVEMENT.

DR. CLOUD.—Man is certainly an enigmatic creature:

"Avenging men upon their enemies,
And making them repent their own revenge ;
Goading the wise to madness ; from the dull
Shaping out oracles to rule the world
Afresh, for they were waxing out of date,
And mortals dared to ponder for themselves."

Is it not surprising, Doctor, that there should be such great dissension between our brethren of the "plow and hoe," when we are all working to the accomplishment of the same end? How forcibly we are struck that "man never is, but always to be blest" when we discover the perverseness of his own will, when confined even to the plain, simple teachings of nature. Having scrutinized the contents of the *Planter and Soil*, in connection with the *Cultivator*, for the last few years, I have been much surprised to find such diametrically opposite statements, from some of your leading contributors. Through the medium of your most invaluable columns, let us get at the truth, and establish it as "fixed facts" for reference ever after.

Will cotton-seed kill hogs if properly boiled; one barrel of crushed corn to two of seed, with a little salt and copperas? I answer, no, but it will fatten them. Will Chinese cane kill cattle? I presume so, if choked to death by it—I have been feeding my hogs bountifully with it for several weeks back, and a lot of nice Devon heifers have helped themselves of the tops and blades. I am now grinding and boiling a most beautiful article of syrup from it, at the rate of 130 to 160 gallons per acre. From one of the back numbers of the *Cultivator*, I gleaned a very valuable piece of information relative to the getting out of timber, in the second running of the sap, or in the month of August—which makes it very tough and durable, not liable to be worm-eaten, or dry-rot. Now why is it, that the stumps from which this timber is cut "should decay so much more readily than if cut in the Winter?" Will they do so? The Peabody and Wyandott corn will pay well if planted upon rich soil, and pay finely to feed to hogs while in the roasting-ear.

I had concluded that the very important point in agriculture, of deep and thorough (Winter shall I say? or) Spring preparation, with light surface, had been conceded and acknowledged by all intelligent planters the true mode; but among my perambulations, I find a great many who contend for mutilating the roots, and, indeed, some who "go the whole hog," and keep the soil from the roots of their corn until a late season, for the purpose of dwarfing the stalk and increasing the ear. In contemplating the past, I am grieved at the thought of taxing my teams and plowmen so unnecessarily, to the injury of my crop. By experience, I have been taught to economize in depth, and convert the same labor to the destruction of weeds and grass, by extending the surface-tillage. Indeed, from these convictions sprung the double-acting circle-adjusting plow, by means of which I am enabled to save 100 per cent. manual labor in the deep and thorough Winter or Spring preparations; cutting two furrows in width or two in depth at pleasure. Also, in cultivation with one mule and one hand, I run two twelve-inch sweeps with straight or turning wings, which perfects most

admirably 4 to 5 foot rows by running around, at the rate of 4 to 5 acres per day.

This system has been introduced to hundreds of planters, most of whom accede to its superior advantages, and readily avail themselves of an implement which will place to their credit \$75 to \$100 per hand, per annum. There are some, however, of the pertinacious, who I would not be much surprised to find discarding all modern improvements, and reverting back to the ancient mode of tillage, with their wooden fixtures, and eventually become wedded to the natural fork as nature's own peculiar device for plowing the soil.

C. B. MAGRUDER.

Variety Farm, Geo., 1858.

MANAGEMENT OF MANURE.

The success of the farmer certainly depends very much upon management of manure. The remark has often been made, that much of the most valuable part of animal excrements is lost, through negligence or mismanagement. The practice of exposing manure to the action of the sun, wind and rain, has been severely censured, and the digging of barn-cellars, the building of sheds, coverings for barn-yards, &c., have been highly recommended.

No good farmer would suffer any of his crops to lie in the field till one-half of their value is lost by exposure to weather; but how is the case with the barn-yard and the manure-heaps? Here is a treasure, indeed; but it is wasting its value continually; are not its virtues every hour escaping into the air?

But many farmers will confess that their management is not such as it should be, but, through lack of capital, cannot make the changes which they desire, in a single year or two. But we contend that a farmer of small means can do much to preserve the virtues of his manure. He can house a part of it, at least, in some way; and he can put a cover of muck or loam upon his manure-heaps, and also in his barn-yard, and thereby prevent most of its virtues escaping. If he hauls manure into the field, if it is not immediately plowed in, it should be put in rather large heaps, and be well covered with earth.

A difference in opinion has existed among distinguished writers and farmers, in reference to the degree of fermentation which manure ought to undergo before applying to the soil. Some are advocates for long, or unfermented manure, and others think that it should not be applied to the soil till it is partially or completely decomposed. The former contend that much fluid and gaseous matter of the manure is lost, unless it be applied immediately to the soil, in its green state, and plowed in. The latter contend that long or green manure cannot be regularly spread, and that the animal matter does not mix intimately with the straw, but is in masses by itself. They also complain that the straw will sometimes dry-rot, and becomes dead, useless matter. It is probable, however, that by proper care, manure in its green state, may be pretty evenly spread, and the straw will not often dry-rot.

It is said that stable manure, when lying in heaps, is liable to be spoiled by being overheated. To prevent this, it would be well to either apply it to the soil and plow it under as soon as may be, or mix it with charcoal and other substances.

It is a sign of extraordinary merit, when those who most envy it are forced to praise it.

Horticultural and Pomological.

WILLIAM SUMMER, EDITOR.

FRIENDS OF HORTICULTURE.

We present the "FARMER AND PLANTER" under new auspices, and we cannot but hope that it will prove acceptable to your tastes, and that you will not suffer it to languish for support. It will be devoted to your interests, and the improvement of the State which has given us birth, and in whose bosom we expect to rest. After an interval of a few years, we again come forward to labor in a cause which is dear to us, and trusting that the experience of the past will aid us in the future, we feel encouraged to do whatever we can, in our humble way, to advance the cause of Pomology and Horticulture in the South. The kind and flattering manner in which our past efforts were received, not only by our brethren of the Horticultural press, but the editors of the journals of our own State, has had no little influence in inducing us once more to make the effort to advance and do service in this most interesting of all pursuits. With the best feelings, and with a heart which knows no other motive but the true welfare of our native State, we come before you, and extend to all the hand of fellowship.

During these few years past we have not been idle, but have been steadily laboring in the pursuit of Horticulture, which, from our soil and climate, is so different from that of Europe and the North, from which we have been mainly dependent for information; and we trust to be able to give you the result of our experience, from time to time, as we visit you at stated periods at your homesteads. It must not, however, be expected that the editor should contribute the entire portion to the department under his care. We want the experience and sentiments of our patrons from all portions of our State, which embraces such a wide range of soil and climate, and we shall be pleased to receive contributions from all who will help us.

The success of our recent State Fair has carried conviction to every portion of the State that we have the means of improvement within ourselves. The tables loaded with the offerings of the garden, the orchard and the vineyard, with the many nice preparations contributed by our good house-wives, called forth expressions of admiration and praise from distinguished visitors from our sister States, and we felt a glow of honest pride that these compliments were so well merited.

The garden, with its wholesome and varied products, so important in its aid to the farm, and which adds so much to the comforts of the table, shall claim

our attention, and we hope our friends will give us their experience in the cultivation of the various useful vegetables which properly belong to it.

The successful culture of the grape on the light sandy soils of the State is evidence of what may be done in this department. We have, too, a large portion of granitic soil, where there can be no fears of success. With a little practice and skill, pure wine of excellent quality will be made, which will do much to promote true temperance. We shall be happy to receive communications from our friends upon these subjects.

The Orchard, with its various fruits, shall not be overlooked, and we trust to be able to give information, derived from experience, which will give increased encouragement to Fruit culture. In this, as upon all topics upon which we shall treat, we will endeavor to be plain and practicable, so as to be understood. We have had no little experience, and in testing alone nearly all the improved varieties of the apple, so generally cultivated at the North, we have found the early kinds only particularly adapted to our climate, and for those which are to succeed them, we must look to the productions of our own soil and climate. This subject has only forced itself upon the minds of our Pomologists within a few years past, and already we have several hundred of the choicest varieties, furnishing a succession from the earliest to the latest in ripening. We must look to the "cotton belt" for the only late varieties upon which we can with safety rely; and in this we are convinced of the great resources within ourselves.—As with the Apple, so with the Peach; we have to rely upon our own varieties, which will ripen after the Heath, and these, too, furnish a succession from the earliest until frost. Our climate is the home of the Pear, and we can confidently recommend the cultivation of this delicious fruit.

We trust our people will be encouraged to go forward in this work of improvement, and in everything which will add to rural taste. Plant, then, vineyards, beautiful and interesting, about your homesteads—Orchards, rich with the Apple, useful in its fruit, and glorious and beautiful in its white-tinted blossoms—the Peach, with its lovely bloom, warm with the breath of Spring, and delicious in Summer with its wholesome and abundant fruitage—the Cherry and the Apricot, fragrant in their early offerings—the Plum, with its luscious and abundant clusters—the Pear, golden, melting, and always acceptable to the palate—the Fig, wholesome, and memorable for its early associations—bring all these to dwell around the homestead, and they will do much to entice you to a love of contentment with your own land, and you will have contributed something of value and interest to the State.

WORK FOR THE MONTH.

The Vegetable Garden should be thoroughly spaded up, and made ready for planting. Thorough trenching will be of great advantage, as good vegetables cannot be grown without a deep, rich soil.

Asparagus beds should be dressed and properly enriched. Remember that salt is a specific for this plant—dress the beds with a thorough covering of salt. New plantations of *Asparagus* may be made in this month and the next. The ground for the bed must not be wet, not too strong or stubborn, but such as is moderately light and friable, so that it will readily fall to pieces in digging and raking.

It should have a large supply of well-rotted manure, three or four inches thick, and then be regularly trenched two spades deep, and the manure buried in each trench ten inches below the surface; then dig the ground over again eight or ten inches deep, mixing this topdressing, and incorporating it well with the earth. The ground being thus prepared and laid level, divide it into beds, allowing five feet for every four rows of plants, with alleys 20 inches between each bed. Strain the line along the bed six inches from the edge; then, with a spade, cut a small trench close to it, about six inches deep, making that side next the line nearly upright, and when one trench is opened, plant before you open another—placing the plants ten or twelve inches distant in the row, and let every two rows be twelve inches apart. The plants must not be placed flat at the bottom of the trench, but nearly upright against the back of it, and so that the crown of the plants may also stand upright, and two or three inches below the surface of the ground, spreading their roots regularly against the back of the trench, and at the same time drawing a little earth up against them with the hand, as you place them, just to fix the plants in their position until the row is planted. When one row is thus placed with a rake or hoe, draw the earth into the trench over the plants, and then proceed to open another drill or trench, as before directed; and fill and cover in the same manner, and so on until the whole is planted. Finish by raking the surface of the beds smooth. To raise *Asparagus* in perfection, the ground must be made exceedingly rich to the depth of fifteen inches. Where this has not been attended to, lose no time in spreading a good coat of manure, and fork it in immediately.

Onion sets should now be put out, and onion seed sown in drills. If the seed is sown with a view to grow onions for use, they should be planted in very rich ground. If for next season's transplanting, sow them in thick drills, in rather poor soil—as they keep better and make larger bulbs when transplanted.

Peas should now be sown—a few for early use.—The *Daniel O'Rourke* is the best early pea which we

have grown. *Sangster's Early* is also a good variety. The principal crop should be sown next month.

Sow *Early York Cabbages*—a few of the small, and a larger quantity of the large variety: also, *Early Flat Dutch*. These two are the best early varieties for general use. They should be sown in sheltered beds, in a border protected by the wall or fence of the garden, and covered during frosty weather.—When grown in hot-beds, they harden with great difficulty when planted out.

Where plantations of *Strawberries* and *Raspberries* have yet to be made, get the ground ready at once. Both of these delicious fruits may be had in the highest perfection, with a little care. They delight in a deep, rich soil; the raspberry preferring that which is moist and rather stiff, and enriched with manure; the strawberry delighting in a lighter soil, rich in vegetable mould, requiring little or no manure unless thoroughly decomposed. We find *Longworth's Prolific* one of the best early varieties, and *Hovey's Seedlings* the best for a general crop. *McAvoy's Superior* is also a fine variety. *Wilson's Albany*—a new variety—promises to be the best strawberry yet introduced.

Spinage may be sown now. The ground should be made rich.

The Orchard.—Continue to transplant all kinds of fruit-trees and shrubs, and prepare for transplanting where not already done. With this view, accumulate manure—bones, lime, rubbish, ashes, sweepings from the poultry-house, &c., all of which are excellent for fruits. Lime, both the carbonate, as found in shells, marl, or lime rubbish, and the phosphate, as in bones, is indispensable for fruit-trees. The want of it in the soil is the very great cause of the rotting of apples on the trees. The animal matter contained in bones is highly stimulating, and contributes to early fruitfulness. The bones only require to be broken in pieces and mixed with the soil used in planting.

Examine your peach trees, for borers about the roots—clean away the earth and remove the gum, and with a sharp knife remove as many of the grubs as you can; then plaster up with clay, to which add ashes and sand, which will form a cement—as recommend in a paragraph from the *N. E. Farmer*.—This is the best present remedy. At another time we will give some further hints upon this subject, which will prove useful and effectual in arresting the ravages of this destructive enemy of the peach.

SORGHO SYRUP KEEPS WELL.—Among the articles shown at a late Fair in Winnsboro', was a sample of Sorgho Syrup, of which the editor of the *Fairfield Herald* says: “A bottle of Chinese Cane Syrup, prepared in 1857, by Hon. E. G. Palmer, was submitted to our taste. It is in fine keeping, pure, and of flavor richer than when new.

SUGGESTIONS ON FISH RAISING.

BY DR. WM. D. KERSH, OF ARKANSAS.

The value of fish, as an article of food, with some as a luxury, with other nations as a necessary of life, and the importance of supplying their demands as an industrial resource, may be estimated from the fact that 800,000 persons, one-fifth of the whole population of Holland, have been employed in catching a single species. In the year 1830, 308,462 barrels of another species were packed by the single State of Massachusetts. 300 salmon have been caught in Norway, and 700 in the river Tweed are sometimes caught at a single cast of the net; some of these salmon are six feet in length. The polite Frenchman, as well as the savage Indian, is delighted with the flavor. The Esquimaus subsists almost entirely upon them. He relishes the oil, and finds it more wholesome to his moral and physical necessities than alcohol. He suffers infinitely less from dyspepsia and consumption than the New Yorker or Parisian.—Fish-raising was as fashionable among the ancient Romans as it is now getting to be in the Southern States, but the Romans could not avail themselves of the light which modern natural science can be brought to throw on this enterprise, nor did they ever arrive at that perfection to which a long experience has now brought the Chinese. The Roman fish-ponds were immense salt-water reservoirs, and they imported and propagated the choicest varieties from Sicily, Greece and Egypt. Lucius Muræna was so named from his eels. Lueullus hollowed out the rocks into deep caverns, and tunneled a mountain near Naples, to introduce water into his pond.—Crassus, and some of the Roman ladies, mourned over the death of their favorite muraena, or eels. Vediis Pollio, a friend of Augustus, sometimes threw his slaves into his vats, for the pleasure of seeing them devoured by his eels.

Two thousand plates of fishes, of rare varieties, were on the supper-table given to Emperor Otho by his brother. The improvement which I propose is, (so far as I know,) original, and is based on the nature of fishes, both as regards their destructive habits, and the economy with which the different species may be supplied with food. It also possesses this other very great practical advantage, of raising an immense supply of fish within much more contracted limits of fresh or running water, and without the farther trouble and inconvenience to which the Chinese submit, that of raising the spawn in a separate vat, or pond. These advantages are to be gained by the proper selection of varieties or species for propagation. The inhabitants of the waters, like those of the land, are divided in classes, orders, families, genera and species—all of which are more or less exclusively carnivorous, or flesh-eaters, and

phytophaga, plant-eaters. Instead of choosing the insectivorous or carnivorous perch, maw-mouth, trout, &c., the selection should be exclusively the largest size, least bony, and best flavored of those that feed on grains, herbs, fruits, and by scavenging. The family of Theutyes, of the order of Acanthopterygii, are plant-eaters. The Cyprinoids, or Carps, of the abdominal Malacopterygi, are the least carnivorous of fishes. This family includes the tribe of Cyprinus, to which the common carp, gold-fish, barbel, gudgeon, tench, &c., belong. The carp, from the warmer parts of Europe, is exceedingly prolific. It delights in tranquil waters, grows three or four feet in length, is tenacious of life, and the living fish or hatching eggs may be imported. Some choice varieties of redhorse and the buffaloes (Carpoides, Cyprinus, *C. Urus*, *C. Taurus*, &c.,) would be of a very different nature from, and immensely preferable to anything I have heard proposed. There is a wide field for selection. Agassiz says of the Cyprinoids: "This is one of the most interesting families of our fresh-water fish, both on account of the number of genera and species inhabiting our lakes and rivers, and of the diversity of their forms and habits." For the benefit of those who have not the conveniences for fish-raising, the Legislature should pass an act to compel the fishermen at every shad-fishery to open the bodies, and take or otherwise press out their eggs immediately on catching, preserve them in water, and deposit them in a reservoir or pond where no other fish can destroy them, but where they may escape after hatching; thus, in a few years, our markets would again be stocked with an abundance of that wholesome luxury.

Fresh fish are much more beneficial to health, as well as more gratifying to the palate, than the salted article. It may be believed that pisciculture may be made to yield greater net profits than many other branches of husbandry. No one would think of deriving profits from raising a carnivorous terrestrial or land animal for table use; it will require no inconsiderable amount of flesh to sustain life itself. A jaekfish (*Esox*) or trout will devour their own species of nearly their own size or weight, and after digestion will not have derived much benefit from the transaction. It is upon this difference in the nature and habits of animals that our suggestions are based.

[NOTE.—This article was presented to the State Agricultural Society of South Carolina, in 1856, and not having been published, by reason of the discontinuance of the Society's journal—and embodying, as it does, some novel suggestions, based on the natural history of fishes, we hope will now be acceptable to our readers.—ED.]

MARIA LOUISE PEARS AT CHRISTMAS.

Our townsman, Mr. I. D. MORDECAI, exhibited fine specimen pears of this variety at the State Fair in November last, from a small dwarf tree in his garden, which produced over *six hundred* pears. We brought six specimens home with us, and they contributed much to the lusciousness of our Christmas dessert. As they melted on our tongue, we blessed the hand that planted the tree, blessed the man that had the wisdom to nurture this queen-named pear, and hoped that our mention of his success, in this department of fruit-growing, would stimulate all laggards who possessed no promising tree friends, to plant, not only pear trees, but all sorts of fruit-trees, in order that they might possess the luxuries of the Orchard, both for their every-day meals, and their holiday festivals. May friend MORDECAI's pears never be fewer, and his interest in fruit-growing always be rewarded with like abundance.

For the Farmer and Planter.

SECOND CROP OF POTATOES, &c.

MR. EDITOR:—I am now digging and eating Irish Potatoes, being a second crop from seed planted in February last. They are of good size, in fine condition, equal in flavor and very similar to the early Spring potatoes, so highly prized.

As I believe few enjoy this treat at this time of the year, and few are aware that we can grow our own winter potatoes, it has occurred to me to drop you a line, and point out how I manage.

I plant my Spring crop in the middle of February, from the best imported seed, in the usual way, and when dug for use the last of May and first of June, the small potatoes, too small for table use, are put away in the house, *spread out in the shade*, and kept perfectly dry. On the 15th of July, the ground is well broken up, flush-trenches made eight inches deep, and well manured with thoroughly rotted compost, to prevent heating at this time of the year, into which the potatoes saved and dried, are planted and carefully weeded and tended, all the time flush till after the first frost, when they are dug and put away for use.

While my pen is in hand, I will just add—I have a fine show of Cauliflowers about heading out, and promising well. Possibly a short account of my mode of managing them, may stimulate others to raise this delightful but rare winter vegetable.

I prepare the ground as for other cabbages, and plant the 1st of April, attending the same; but on or about the 15th of July, after a good rain, I take up each plant, securing some earth to each, and set out two feet apart in good ground. This is intended to *backen* the plant—an important object. In the middle of September I dig *deep* around each plant, and

apply cotton seed liberally, say two quarts to every plant, and cover up. When the seed germinates, it is to be crushed down, and the earth well drawn up to the plant, and so allowed to head in December.—In the upper country, this dressing with cotton seed should be done earlier, so as to start the plants to head before the intense colds of Winter set in.

Notwithstanding the drouth of the Summer of 1858, the extensive rust in cotton, and the storm of September, we have done well in the cropping way; generally enough promising for home use, and a pretty full crop of long staple cotton.

Very respectfully yours,

S. M. D.

Pocotaligo, Dec. 10, 1858.

ACCLIMATION OF FRUIT TREES.

The following remarks by Mr. AFFLECK are so much to the point, on the subject of the Acclimation of Southern trees, that we give them in preference to an article we intended of our own:

“Another year's experience in fruit-growing in the South has confirmed the faith of every experimentalist, who has gone at all rightly to work, in the belief that we can produce successfully, and in abundance, nearly all the fine fruits grown in other countries, and a good many others peculiar to our own latitude. The necessity for *acclimation*, or *re-habituuation*, rather, has become a fixed fact.” One of the most convincing proofs, to our mind, is to be found in the superabundance of fine fruit with which the markets of New Orleans and Mobile have been supplied during the past season—the result, solely, of *planting only Southern-grown trees*.

And here we would remark, that by the term *acclimation*, we mean a *re-habituuation*, rather, to a climate *natural* to the *species*, but to the growth of wood and bark made by the individual plant grown in a colder climate, is altogether unsuited, and which rarely, if ever, does become adapted to a more Southern temperature. We have all seen Northern-grown trees stand year after year, making faint attempts at growing, bearing a few leaves, which are dropped long before the proper season, neither stem nor branches increasing in diameter, and rarely a fruit to be seen. Yet young trees propagated from these upon thrifty Southern-grown stocks, grow and thrive, and bear fruit. Not always, perhaps, the trees first propagated; a second or third generation being often needed before a thorough acclimation is brought about. Young trees, cut to the ground, and compelled to make an entirely new growth, commonly thrive well. Fruit-growers, having become fully satisfied of this fact, either grow their own trees, or procure those of Southern growth, with an entire confidence in their being able to produce fine fruit, by the exercise of a moderate share of skill in the planting and the after culture of their trees. Without these, no one need look for great success. During a recent trip to Kentucky, we found the same opinions prevail there. Quantities of trees had been brought from the nurseries of Western New York and Long Island, and sold at such low rates as to induce many to risk them, who were desirous of extending their orchards; and the results, in every instance in which we heard, were, that the trees never thrived

and bore fruit to any extent, unless cut to the ground and forced to make an entire new growth. But from the habit, in the North, of working their trees at some considerable distance above ground, this could rarely be done; consequently, the buyers of these unacclimated trees met with almost universal disappointment.

THOMAS AFFLECK.

Washington, Miss.

FRUIT CULTURE AT THE SOUTH.

The following article, which we copy from the *Soil of the South*, from the pen of JARVIS VAN BUREN, Esq., of Clarksville, Georgia, is so much in unison with our own views, that we give it entire, and ask our readers to study it. Anything which is as well said, and to the point, too, as the following, cannot be repeated too often. When we state that Mr. VAN BUREN is one of the most skilful pomologists in Georgia—thoroughly and entirely devoted to this delightful pursuit during his leisure hours—we know that it will give additional zest to matter which embodies not only good reasons, but good practical value.—ED.

“One of the most fatal mistakes committed by those who have engaged in the cultivation of fruits at the South, has been the adoption of the methods prescribed by Northern nurserymen. After many years of disappointment in following the directions of English gardeners and nurserymen, they had to abandon them, and strike out a system of their own, better suited to their climate and soil, before much progress was made in this department of horticulture. We at the South, in like manner, have been led, without reflection, into the same error, for there is not a greater difference between the climate and soil of the Northern States and England or Belgium, than there is between the Northern and Southern States; and it is not reasonable that the same *modus operandi* would answer well for the cultivation of plants and trees of both sections of country. What is yet more strange, is, that whenever any of the Southern nurserymen we have, have written or given directions to those who have purchased from them, it has been but a reiteration of rules laid down at the North, so far as I have seen, until there is (from the frequent failures of many who have attempted raising some kinds of fruit) an opinion prevalent that they cannot be grown here successfully. My object in writing this short article is to endeavor to disabuse this opinion, by prescribing such plans and processes as experience has taught me to be better adapted to the region of Georgia, and which I hope and believe will prove satisfactory to all who may try it. I shall begin with a few simple rules for the cultivation of the apple, and at another time, if this meets with a favorable reception, take up the other varieties of fruit by turns.

In the selection of a site for an orchard, take one that inclines to the north or north-west. Plow and subsoil it well, and stake off for your trees twenty-five feet each way; dig the holes from one foot to eighteen inches deep, and three feet in diameter; select trees one or two years old, from a good Southern nursery, and plant them in these holes, filling them up with a soil taken from some swamp or low ground, if convenient; if not, get that composed of decayed leaves, or other vegetable substances, to

which should be added a shovelful of ashes or lime. The after culture of the ground is of more consequence to success, than the mere planting of the trees. This should be done by always keeping it covered with a green covering of some kind. I prefer and use clover: in sections of country where this does not grow well, I would choose peas. The advice of Northern nurserymen, to keep the ground clean, or in a hoed crop, will not answer here, as it becomes so heated by our vertical sun as to injure the roots of the trees, and either kill or render them worthless. Mulehing has been advised. I say the best mulch is a green crop; nothing else is as good a radiator of heat as this. Keep the ground clean for a few inches about the trunks of the trees, so as to prevent insects from harboring there. Manure and plow the ground once in every three or four years, and I will not hesitate in saying that the choicest apples may be raised from the seaboard to the mountains in Georgia. By the way, I should have mentioned that the trees should be trained with low heads; the limbs should be suffered to put out about four feet from the ground, and should the tree be of upright or tall habit, cut off those branches that shoot up, and compel a lateral growth, as a tree with a low, spreading head, always bears best, and, at the same time, shades and protects the trunk and roots from the heat of the sun. It is a good plan to tie a common clapboard against the south-west side of the trunks, for two or three years, or until the top has made growth sufficient to shade them.—Where this is neglected, I have known the trunks to become blistered, and the death of the tree be the consequence of the neglect. In conclusion, I will reiterate, keep a growing crop on the ground that will cover it well, and there is but little doubt that you will succeed, anywhere, in raising this delicious fruit.”

THE USE OF FLOWERS.

We only wish we could induce some of the fair ladies of the South to write us such contributions as the following, which we clip from an old paper, but which has lost none of its fragrance by having been so long preserved by the “art imperishable.” It will lighten any sad heart to read it, and we most cheerfully insert it in preference to anything we could say on so delicate a subject:

“If you wish to know, in passing through the country, which of the homes are the most cheerful, look at the door-yard. There is an index of the taste, habits, and neatness of the occupants. The poorest man will have some little plants of flowery beauty in his door-yard, if he be industrious or have a neat, domestic wife; there will be, despite of poverty, some of Nature’s luxuries—some Four-o’clocks will there be lifting their bright faces to the sun, as if to proclaim in their many colors the many joys their presence has diffused to the hearts of the inmates; the yellow Marigold, Pansies or China Aster, even the weed which bears a pretty flower, will there be seen. Children learn to love Nature through flowers, and first learn to read the love of Him who made them, as written on their fragrant leaves. Let not a nook or corner where a child may roam be without flowers; let not a cottage door-yard, exposed to the gaze of the young, be barren of these little monitors. There is a language of love in the growth and habits

of their petals; let the young know its influence—let the aged see through them the joys of life, and each little flower bring back some reminiscence of the past.

Who does not relish the smell of fresh upturned earth? Who, that has known the pleasure, does not watch with interest the germinating seed or unfolding blossom? And who ever regretted their labor among flowers? Who ever felt unhappy in being able to send a budding bouquet to a sick or absent friend? None—surely none. In the cottager's yard or prince's garden, if we see no flowers, we may look in vain for flowers of the heart in the occupants of the dwellings; there is something beside the means wanting. Love Nature, you will love her originator, and be happier for the love.

Then, too, by flowers does the infant mind first learn to meditate and wonder; by them is a spirit of inquiry by observation nurtured, and in their capsules do the flowers hold the seeds of wisdom and knowledge. Thus in childhood are they sown, and in manhood developed in the full-blown fruit, blossoms of scientific investigation. Study, which has been induced and fostered with pleasure for a reward, is not apt to tire or vex the mind, and thus will the adult pursue with interest and inquiry an employment which has Nature for a patron and instructor."

SUBSOIL GARDENING.

ALWAYS DO YOUR BEST, AND LEAVE THE REST.

Some people are afraid to look below the surface soil, apparently regarding it as a sacred spot, that must not be disturbed or intruded upon. Now, the fact is, too many of us have long been looking at the surface of things, instead of penetrating the subsoil below and examining its texture, to see if a mine of wealth be not there seereted.

The period has arrived when gardening must commence, and those whose garden-plots are underlaid with a stiff, tenacious subsoil, would do well by considering whether some measure might not be taken with it, that would render it more certainly productive. It has been demonstrated beyond cavil, that when a tenacious subsoil is dug and loosened up, without bringing it to the surface, or mixing it with the vegetable mould of the surface soil, if the season is very wet, the water descends into it readily, and the plants are protected from the injury of their food being too much diluted with water; and if a drought comes on, the roots penetrate deeper, and are benefitted by the reservoir of moisture which lies below; and the capillary attraction in the earth brings the moisture upwards to the surface, and feeds and refreshes the vegetables. Any way you may fix it, it does much good, like all those good, honest old rules, that work well either end foremost.

The way to work it is to dig a little gutter a spit deep, and the width of a spade, along the side of a bed, and throw the surface earth which comes out of it to the other end of the bed which is to be dug, where it will be required for the purpose of filling the trench which will be left at the conclusion of the work. Then begin at one end of this gutter and dig it up, and turn it over *in the bottom*, from end to end; when this is done, begin and dig in the usual way, turning down the surface soil on to the subsoil which has just been dug; doing this from end to end, properly, will leave another gutter, which dig and overturn as before; and so proceed

till the bed is all dug two spits deep; the subsoil being turned topsy-turvy, but none of it being brought up or mixed with the surface mould.

Trenching differs from this in turning the whole over, and bringing the subsoil to the surface; but that would be inexpedient when the vegetable mould was not at least two spits deep, unless the ground should be very heavily manured.

Now, what is the objection to putting a garden through this salutary process? None at all, excepting that it will require twice the amount of labor; and this may appear to some a serious objection, but its adoption once in four or five years may be sufficient, unless the soil is very stiff and intractable; and it enables the gardener, gradually, every year, to extend his diggings a little deeper into the subsoil, and by bringing up to the surface a small portion of it annually, the surface soil is constantly gaining depth, which is a matter of prime importance in obtaining good crops with much greater certainty.

Should it be too serious an undertaking to overturn a whole garden in this way in one season, try a single bed this Spring, and become convinced of the importance of doing everything you undertake in the way you are capable of; and then resolve never again to do anything *well enough*, which means, in common parlance, just as bad as will in any way answer the purpose for the time being. The foregoing plan has no novelty in it, for it has been often done, with the greatest advantage resulting from it. There is no untried theory about it that need scare the most timid; and the writer does not expect to gain anything further by the suggestion, than the pleasure of seeing many more good gardens, stocked with delicious, flourishing vegetables, than he has in times passed witnessed.

From the *Country Gentleman*.

BOTANIC GARDENS.

The study of plants and trees, which are so intimately connected with human economy, and minister so variously and extensively to human wants, has been in all ages regarded as a pursuit worthy man's high intellectual character. The study of any branch of natural history does not necessarily embrace those considerations relating to the market value of the products obtained, nor the amount of the same; these are, to the naturalist, minor and secondary questions. To study nature, we must study the natural objects around us as they are. Many persons of refined taste, of superior education, and a high order of intelligence, fail to appreciate that boundless beauty and variety in plants and flowers that others so readily observe. This diversity of tastes we shall not attempt to account for. Dependent as man is on the products of the soil, at least in civilized life, the "herb producing food" has been from the earliest times an object of interest, and if we may rely on the ancient writers on plants, for evidence, it may be clearly shown that but very few vegetable forms were wholly unavailable to the herb-alist. In barbarous and semi-barbarous countries, we find the aborigines rely in many instances on roots and fruits alone for food, led by tradition, or an intelligence little more elevated than mere instinct.

In the successive progress of our race, assuming that we are progressive, a desire has been felt for

more certain information regarding the products of the earth—some recorded history, a little more minute than is contained in the sacred records, of the nature of those plants given to man for his support and enjoyment. This record, or history, has been in course of preparation from the time that man first began to observe nature around him. At the present day, by the aid of the press, we can reckon treatises on plants by the thousands—whole libraries devoted exclusively to the elucidation, description and arrangement of plants.

The plants themselves become objects of interest; the dry description of the naturalist will no longer suffice; the living, growing organism must be examined and admired, and as means accumulate and human enterprise expands, the forests and mountains of distant and almost unknown lands are ransacked by enthusiastic collectors of what are to many but mere *weeds*—weeds which spring up spontaneously in the hitherto unexplored jungle or arid hilltop.—The cool, calculating mercantile man smiles at the waste of time, money, and energy, in such a pursuit. The liberal merchant, whose ships touch at the distant tropical ports of little frequented seas, generously admits on board a collector, acknowledges the benefit conferred upon society at large, and aids in the universal progress of natural science.

The fruits of such expeditions and explorations, are, in many instances, but a mass of dried leaves, or a few seeds and roots. Yet these, if hitherto unknown, are, to the naturalist, of priceless value.—The fruits of such repeated explorations, and the indomitable ardor of our great naturalist travellers, may, however, be found in the multiplied resources of the human family, in the workshop of the artizan, in the chemist's laboratory. We could not, however, if we would, estimate the benefits to society of the labors of those who have, in the pursuit of natural history, surmounted almost superhuman obstacles, and explored tracts of country hitherto inaccessible to all but the aboriginal inhabitants.

For several centuries has this system of collecting the products of the soil of foreign countries been going on. One of the earliest fruits of it was the potato, or at least one of those of most value as an article of food; the date of the introduction of wheat, and several other staple articles of food, is still a matter of conjecture.

Repositories have been established for the reception of the plants, roots, seeds, &c., which have from time to time, been accumulated. Glass structures of great extent have been provided. Hot-houses, with a temperature closely approximating to that of the tropics, have been secured by the nice appliances of art and skill, until scarcely a known plant, susceptible of transportation by seed or otherwise, that may not be examined and admired in the great conservatories of Europe.

Thus Botanic Gardens have become, in the old world, one of the most indispensable accompaniments of universities, colleges, and high schools.—They would never dream, now, of teaching Botany in Europe, without the aid of some neighboring Botanic Gardens.

Whether the Botanic Gardens, as we expect to know them here, are likely to serve the desired object, my next article will attempt to consider.

Philadelphia, Pa.

R. R. S.

PAIN IN THE STOMACH.—Swallow five or six grains of white pepper, for six or seven mornings.

THE PROPER KIND OF TREES TO PLANT OUT.

A gentleman, originally from New York, but now a valuable citizen of South Carolina, who bids fair to become eminent as a pomologist, and who has instituted experiments in various fruits, far in advance of general practice, thus sensibly writes to us:

"I desire trees of uniform size, one year old, from the graft or bud, as the case may be, and fitted, as regards the conditions of the roots, for immediate and vigorous growth. I am quite averse to buying large fruit trees. 1st. They cannot be systematically trained; and 2d, They require to be shortened in so much, to compensate for mutilation of roots, as to present a wide surface of wounds. Trees, too, should be of Southern propagation, and thus, in some measure, adapted to our climate. We shall never have Southern nurseries of great extent and merits, until we cease to buy Northern trees."

Maiden trees of one year old, we always prefer, from the reasons given so clearly by our friend.—But how different is the habit of persons ordering trees, and how much fallacy exists in notions which prevail in this matter! Some persons wish an orchard in full bearing the next year after they plant, and accordingly order large trees, with spurs and buds, all ready formed for the immediate production of fruit. For these men disappointment lies stored up, and their labors are never to be rewarded. A tree is like an infant, it must be taken young; nurtured and trained by the proper rules: in fact, it must be educated by proper culture to fit it for bearing perfect fruit. If left to the uncertain results of natural action, it will become wild and rampant in its form, and degeneracy in the size and flavor of its fruit is certain. We say this in order more clearly to fix the idea in the minds of our readers, that too much attention cannot be paid to the preservation of the roots in transplanting trees. We may as well stop up the mouth of a child with cement and expect it to live, as to plant out a large-topped bean-pole looking tree, with a lank body exposed to the sun's rays, and suppose it would flourish.—When the tree planted has the proper kind of roots, then feed it—yes, feed it bountifully, and our word for it, your labor will be rewarded.

CURE FOR THE BOTS.—Draw a cord tightly around the neck, or sufficiently so to raise the vein; then make an incision, taking 3 half-pints of blood from the horse, to which add one half-pint of fine salt.—Put the same in a bottle, and drench the horse before it cools. The bots loose their hold upon the horse to eat of the blood, while the blood and salt act as a purge to carry off the bots. G. H. M.

Williamette. O. T.

FEEDING POULTRY.—Prof. Gregory of Aberdeen, in a letter to a friend, observes: As I suppose you keep poultry, I may tell you that it has been ascertained that if you mix with their food a sufficient quantity of egg-shells or chalk, which they eat greedily, they will lay twice or thrice as many eggs as before. A well-fed fowl is disposed to lay a large number of eggs, but cannot do so without the material of the shells, however nourishing, in other respects, the food may be; indeed, a fowl fed on food and water, free from carbonate of lime, and not finding any in the soil, or in the shape of mortar, which they often eat on the walls, would lay no eggs at all, with the best will in the world.

Domestic Economy, Recipes, &c.

We thank our esteemed friend, Mrs. DONNELLY, of Greenwood, for the Receipts furnished, and shall be pleased to receive others for publication, not only from Mrs. D., but from all our excellent house-wives. With the Receipts, came a bottle of nice domestic Wine, of superior flavor—for which she has our thanks:

FOR CLARIFYING BLACKBERRY WINE.—To one gallon of the Wine, dregs and all, add a tea-cupful of light, brown sugar, and the white of two eggs, well beaten in a cup of water; stir all well together, and put in the kettle to boil—taking care not to stir it after it is put on the fire. Boil a few minutes; then pour into jelly-bags—pouring it back into the bags repeatedly, until perfectly clear, as in making jelly.

The specimen I send you was made from *just the dregs* of all my bottles, after pouring off the clear Wine. I think it important for the ladies to know this, for we have always had to throw it away.

FOR MAKING MUFFINS.—To one quart of flour add half a teaspoonful of cream of tartar; sift them together; beat two eggs well, with a teaspoonful of salt; add a pint of milk; then add the flour; melt half a tablespoonful of lard, and beat all together for a few minutes; put into your muffin-rings and bake in a quick oven.

CLEANING SILVER.—A desideratum long sought for, has now been achieved—that is, a means of perfectly cleaning articles of silver without injury to the metal. It is the discovery of Professor Bottger, a German. Take a glass or glazed vessel sufficiently large for the purpose; fill it with a strong solution of borax, or of caustic potash; drop into it an inner vessel made of zinc, and pierced with holes as a sieve. Then take your silver, plunge it into the liquid, moving it up and down, being careful that at each plunge it comes in contact with the zinc. The effect is magical; for under the combined action of the solution and of the electricity evolved by the contact of the two metals, the silver loses all its dirt and discolorations, and becomes as bright as when first manufactured. Should it not be convenient to use the inner vessel of zinc, the cleansing may be accomplished by sinking the silver in the solution, and stirring it about with a small rod of zinc. It is essential to success that the two metals touch each other frequently.

STALE BREAD.—It is not generally known that stale bread, when immersed in cold water for a moment or two, and re-baked for about an hour, is in every respect equal to newly-baked bread.

Buckwheat cakes are less tough and not as liable to sour, when mixed with *salt-rising* instead of hop-yeast.

CURING BEEF.—This being the season for families to select their choice pieces of beef for curing, we give the following receipt, which is said to be the best in use:

Take 6 gallons of pure water, 10 lbs. of Liverpool salt, (in the 4 hot months, 12 lbs.,) 6 lbs. brown sugar, $\frac{1}{4}$ lb. saleratus, 2 ounces of saltpetre.

Scald and skim as long as anything rises. When stone cold, and the beef has been killed at least 48 hours, and packed away snug, covering the bottom slightly with salt, turn in and completely cover with the pickle, and in ten days begin to eat; cover with a stone and press your beef when boiled.

Hung-beef and pork-hams may be cured in the same way to perfection, requiring to lay the first 4, and the latter 8 weeks.

A GOOD YEAST.—Add to one pound of flour, one quarter of brown sugar, and a little salt; boil moderately in two gallons of water for fifty minutes; remove it from the fire, and allow it to stand till it becomes milk-warm. Bottle and cork. Half a pint of this yeast is sufficient for ten pounds of bread.—If corked closely, and kept in a cool place, it will retain its goodness a long time unimpaired, and the bread made with it is excellent.

FOR SPRAINS AND SWELLINGS ON MAN AND BEAST.—Liniment—1 pint alcohol, 1 oz. gum camphor, 1 oz. hartshorn, 2 oz. spirits turpentine, 2 oz. origanum oil, 1 oz. laudanum. If too strong, reduce by mixing in whisky. It is first-rate to revive ladies from fainting fits if applied at—the nose.

TO PRESERVE QUINCES TENDER.—Every house-keeper knows the difficulty of preserving quinces so that they will not become *hard*. The following directions, from home experience, obviate the difficulty effectually, and produce a tender quince sweetmeat: Pare the fruit, and cut into quarters, eighths or rings, as you may fancy. Then boil in water until soft, and take out the pieces, placing them on plates to cool. Boil the parings and seeds in water, and to the jelly-like liquid obtained, add one pound of fruit. Boil and skim to clarify, add the cooked fruit, and boil gently for half an hour. Take out the fruit, and boil down the liquid until it assumes a jelly-like appearance on cooking a little of it, and then return the fruit, and put away for future use. The extra good quality will repay any extra trouble.

COTTAGE PUDDING.—Mix about two pounds of pared, boiled and mashed potatoes, with one pint of milk, three eggs well beaten, and two ounces of sugar. Bake three-quarters of an hour.

INDIAN LOAF.—Two quarts fine corn meal, scalded dry, one tablespoonful salt, one and a half pints of flour, one pint of molasses, one pint buttermilk, teaspoonful saleratus; mix well, and bake three hours, slowly, in an iron basin.

To wash hair brushes, never use soap. Take a piece of soda, dissolve it in warm water, stand the brush in it, taking care that the water covers only the bristles. It will almost instantly become white and clean. Place it in air to dry with the bristles downward, and it will be as firm as a new brush.